ELEMENTARY FACTS

BEARING ON THE

SILVER QUESTION

WITH SUGGESTIONS AS TO THEIR

PRESENT SIGNIFICANCE.

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BY

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ELEMENTARY FACTS BEARING ON THE SILVER QUESTION.

I.

Preliminary Statements.

The word "bimetallism," as used in present money discussion, originated in 1869 with Henri Cernuschi, now recently deceased, an eminent European financier and economist. At the International Monetary Conference of 1881 he used the word as meaning, "the monetary system which consists in simultaneously coining any quantity of gold and silver, on the footing of a legal ratio between the weight of the monetary unit in gold and the weight of the same unit in silver." (See p. 488, *American Report of International Monetary Conference of 1881.*) Although the word is comparatively new, the system mentioned is old, and is illustrated by two celebrated statutes, extracts from which are given in the appendix. (Notes 1 and 2.)

By "free coinage of gold" is meant, that all persons may, without restriction, deposit gold in the United States Mint and have it converted into United States gold coins. This right now exists by law. (*Appendix*, Note 3).

By "free coinage of silver" is meant, that all persons may, without restriction, deposit silver in the United States Mint and have it converted into United States silver coins. This right existed by law in the United States, from the foundation of the mint, in 1792, until February 12th, 1873, when the right was taken away by statute, and it has not since then been restored.

The ratio of "16 to 1" means, that in the coins of the United States sixteen ounces of pure silver shall be equal in value to one ounce of pure gold, and in like proportion for smaller or larger amounts of the metals. "16 to 1" is not an exact expression. It is intended to refer to the present legal ratio between the weight of pure silver and

the weight of pure gold in coins of the United States of equivalent value. The exact ratio is 15.988 to 1, but this is so close to 16 to 1 that the latter has become the popular expression of the present legal ratio. The pure silver contained in ten silver dollars is 3,712.5 grains. The pure gold contained in a ten-dollar gold piece is 232.2 grains. It will be observed that the former is 15.988 times the latter. Advocates of the "16 to 1" ratio are not asking for something new, but are merely insisting on the maintenance of that which now is, as to the relative weight and relative value of our gold and silver coins.

"Free coinage" does not mean *gratuitous* coinage. If the mint should charge 1 per cent for the conversion of bullion into coin, and should make that charge alike on both gold and silver, yet, if all persons could, without limit as to quantity or preference as to person, deposit gold or silver and have it converted into current coin, after deducting the mint charge, this would be free coinage, but not gratuitous coinage. The United States now coins gold gratuitously for all depositors. (*Appendix*, Note 4.)

In Mexico, a silver-standard country, the mints will coin either metal in any quantity for private persons, but they make a heavy charge, and a greater charge for gold than for silver, the charge being 4.61 per cent of the value for the coinage of gold. For the three years, 1892, 1893 and 1894, she coined of silver more than $84,000,000, but of gold less than one and one-third millions.

The "single gold standard" refers to that monetary system in which gold alone is the standard, and all paper or other currency rests upon the gold volume alone. England and Germany are, at this time, illustrations of countries having the single gold standard.

The "single silver standard" refers to that monetary system in which silver alone is the standard, and all paper or other currency rests upon the silver volume alone.

Mexico and China are, at this time, illustrations of countries having the single silver standard.

The "double standard," as generally used, means bimettallism. It refers to a monetary system in which both gold and silver furnish standard money, and all paper or other currency rests upon the volume of gold and silver. This was the system of England prior to 1816. It was the system of France, and also of the United States, prior to 1873.

"Legal tender" is a quality given to money, by statute, by virtue of which it is to be received in payments, including the discharge of debts.

In this country, the gold coins of the United States are now the only full and absolute legal tender for all purposes of payment.

Silver dollars are a legal tender for all payments, "except where otherwise stipulated in the contract."

United States notes ("greenbacks") are legal tender, "except for duties on imports and interest on the public debt." (*R. S.*, *Sec. 3588.*)

Silver certificates issued under the Bland act (February 28, 1878,) are not legal tender, but are "receivable for customs, taxes and all public dues."

Treasury notes issued under the Sherman act (July 14, 1890,) are, like silver dollars, legal tender for all payments, "except where otherwise expressly stipulated in the contract."

National bank notes are not legal tender as between private parties, but they are receivable for certain debts owing by the United States, and for debts owing to national banks.

Silver coins of a denomination of less than one dollar are legal tender in sums not exceeding ten dollars (*Act of June 4, 1879*).

The "standard silver dollar" weighs 412½ grains troy.

It now contains, and has since 1792 contained, 371 1/4 grains of pure silver.

"Intrinsic value" is a term of doubtful meaning, and is differently used. When, however, it is said that the "intrinsic value" of a gold dollar is one dollar, it is meant that if the material of which the gold dollar is composed be melted and changed to mere metal, without any government stamp or form of money, it will still be worth one dollar; in other words, that the value of the metal of which the coin is composed is the same as the nominal value of the coin. In that sense the words "intrinsic value" will be used in these pages.

The intrinsic value of the gold dollar was, in 1873, and is now, one dollar. The intrinsic value of the silver dollar was, in 1873, one dollar; it is now only 53 cents. The cause of this difference, and the effect of a change of legislative policy, will appear in the following pages.

II.

Federal Legislation.

The Constitution of the United States provides that Congress shall have power "to coin money, regulate the value thereof, and of foreign coin." (*Art. I., Sec. 8, par. 5.*)

It also provides that no State shall coin money or "make anything but gold and silver coin a tender in payment of debts." (*Art. I., Sec. 10, par. 1.*)

Under the authority given by the Constitution, the act establishing the United States Mint was passed, and was approved April 2, 1792 (*Appendix*, Note 2). It provided that the ratio of silver and gold should be 15 to 1, and that any person might bring either gold or silver bullion to the mint, to be coined: that it should be coined free of expense, and that all gold and silver coins struck at the

mint should be lawful tender for all payments whatsoever (1 *U. S. Stat. at Large*, p. 246).

During the first seventy years of this century, the generally accepted ratio in France and southern Europe was 15½ to 1, and those countries had free coinage laws, as to both metals. As silver, therefore, was relatively more valuable in the United States than in Europe, by reason of the established legal ratio, the result of this difference was that silver came to the United States, where it was worth more in gold, and gold went from the United States to Europe, where it was worth more in silver.

June 28, 1834, the United States ratio was changed, by reducing the amount of pure gold in gold coins (4 *U. S. Stat.*, 699). The effect of the change was to make the ratio in the United States 16.002 to 1, instead of 15 to 1, and to make silver more valuable in Europe than in the United States, as the European ratio remained at 15½ to 1. Consequently, silver went from the United States to Europe and gold from Europe to the United States.

January 18, 1837, the alloy in the silver dollar was changed, as also in the gold coins (5 *U. S. Stat.*, 136), and the amount of pure gold in the gold coins was somewhat increased; which had the effect of slightly modifying the ratio, making it 15.988 in weight of silver equal in value to 1 of gold. This has, from that time until now, remained our legal ratio, and, as already stated, it is what is popularly called "16 to 1."

The act of January 18, 1837, also provided "that gold *and silver* bullion brought to the mint for coinage, shall be received and coined, by the proper officers, for the benefit of the depositor."

Under the influence of the ratio above mentioned, our silver was constantly exported, even subsidiary coins. This caused the passage of another act, on February 21, 1853 (10 *U. S. Stat.*, 160), which limited the legal tender

quality of subsidiary coins to payments not exceeding five dollars, and reduced the quantity of silver in the half-dollar, quarter dollar, dime and half-dime, so as to make the ratio in the subsidiary coins such as to make it more profitable to leave these coins in the United States than to export them to Europe; and it had that effect. The quantity of silver in the silver dollar was not changed, and, therefore, as to that coin, the cause of exportation still continued.

No other material change in our coinage laws was made until 1873; so that the law provided for the free coinage of both silver and gold, at the ratios above indicated, from the creation of the mint, in 1792, until the year 1873.

February 12, 1873 (17 *U. S. Stat.*, 424), the mintage laws of the United States were revised, in such a way as to leave gold coins the only coins to which the right of free coinage attached, except a new coin called a "trade dollar," then first created. The gold dollar was substituted for the silver dollar as the unit, and was designated "the unit of value." The further coinage of the standard silver dollar was prohibited, and the legal tender quality of other silver coins, including the trade dollar, was limited to five dollars. This is known as the "Demonetization Act of 1873." This act did not, in terms, limit the legal tender function of the "standard silver dollars" then in existence. By act of June 22, 1874, however, revising the statutes of the United States, it was enacted as follows:

"Sec. 3586. *The silver coins* of the United States shall be a legal tender at their nominal value for any amount not exceeding five dollars in any one payment."

On July 22, 1876, free coinage was taken from the trade dollar, and its already limited legal tender quality was entirely taken away (19 *U. S. Stat.*, 215).

On February 28, 1878 (20 *U. S. Stat.*, 25), the Bland Act was passed, which restored the legal tender quality of the standard silver dollar, "except where otherwise expressly

stipulated in the contract," but did not restore the principle of free coinage for silver. It provided, however, for the purchase of silver bullion at its market price, and that the silver purchased should be coined to an amount not less than $2,000,000 nor more than $4,000,000 worth of silver per month; that holders of this coin might deposit the same in the Treasury and receive silver certificates in exchange, the coin being retained for the purpose of redemption of these certificates. There is a large amount of currency now extant in the form of these silver certificates.

This act treated silver as a commodity, to be bought at market price. Silver certificates issued under this law are by statute redeemable only in silver. Their volume is such, however, that out of the total circulation of the United States, including gold, silver, paper and subsidiary coin, these silver certificates, on the 1st of July, 1896, constituted more than twenty-two per cent of the total volume of circulation. They pass current at par with gold and with other currency of the United States.

July 14, 1890, the so-called "Sherman Act" was passed (26 *U. S. Stat.*, 289). This modified the Bland Act, leaving the silver dollar still a legal tender in payment of debts, except as otherwise specified in the contract, and provided for the purchase of four and one-half million ounces of silver, or so much thereof as might be offered in each month, at the market price thereof, not to exceed one dollar for each 371¼ grains of pure silver. The silver so purchased was to be paid for by the issuance of Treasury notes, which are redeemable in either gold or silver, at the discretion of the Secretary of the Treasury. The amount of issue of these Treasury notes each month depended upon the cost, at market price, of the silver purchased each month. Up to the month of July, 1893, these purchases had been made to the full amount of 4,500,000 ounces per month, and the currency of the country was

increased, to the extent of the then commercial value of the silver so purchased, by the issuance of Treasury notes, increasing to that extent the currency circulation. From July 1 to November 1, 1893, the Secretary purchased less than two-thirds of the amount authorized by statute.

A large part of the silver purchased under this act after July 1, 1891, has not been coined, but has been kept in the Treasury of the United States, in the form of bullion, ready to be coined at any time, and held for the purpose of redeeming the Treasury notes issued in the purchase of bullion.

On November 1, 1893, the purchasing clause of the Sherman Act was repealed, and since that date the only government purchases of silver have consisted of "the silver contained in gold deposits, small fractions of silver for return in fine bars, the amount retained in payment of charges, surplus silver bullion returned by operative officers of the mint, in their annual settlements, and undercurrent and mutilated domestic silver coins for conversion into subsidiary silver coinage." (*Report of Director of the Mint, 1895*, p. 13.)

There is now no existing law under which the paper money circulation may be increased, except that national banks may still be formed and issue a certain amount of national bank paper. The tendency in recent years, with slight modification, has been to diminish, instead of to increase, the national bank circulation, which reached a maximum of $359,000,000 in 1882. It was about $226,000,000 in and out of the Treasury of the United States, on July 1, 1896.

The larger part of our paper currency circulation consists of United States notes (greenbacks), the silver certificates issued under the Bland Act, and the Treasury notes issued under the Sherman Act. Under existing laws, the volume of none of these can now be increased.

The only law under which our coin circulation can

materially increase is the statute which authorizes the free coinage of gold. In the fiscal year 1893-4, the mints of the United States coined $99,474,912 in gold; in the fiscal year 1894-5, they coined only $43,933,475 in gold. Our net gold exports, in the last-mentioned year, amounted to $30,117,876.

III.

FOREIGN LEGISLATION.

In this day of the world, the relations of different countries are so close, through international commerce and otherwise, that the monetary standard of one country will affect monetary conditions in another, and the prices of one country, on the great staples, will greatly affect the prices of others on the same articles, and, as will appear in the subsequent pages, the metallic standard money, of the character that can be used for international exchanges, becomes the ultimate measurer of values. It is important, therefore, at the threshold of this discussion, to know what other countries than the United States have been doing, in the way of monetary legislation.

Prior to the year 1816, England had the bimetallic system, with free coinage, in accordance with the law of 1666, quoted in the Appendix (Note 1). In 1816, however, England changed to a gold monometallic or single-standard system. The change was made at a time when England was using paper money as its circulating medium. The other countries of Europe, however, continued to have either the silver standard or the double standard, and the system in France, which was the most powerful of the countries of Europe, in a monetary sense, continued to be bimetallic.

Early in the seventies, however, a change of legislative policy commenced in Europe. In 1871, Germany initiated a change from the previous silver standard, to the gold standard, and completed the change in 1873. After the

passage of the Demonetization Act, of February, 1873, in the United States, Belgium suspended, in the same year, the coinage of silver; France limited the coinage of silver on individual account, and Holland suspended the coinage of silver. In the same year the Scandinavian Monetary Union was formed, consisting of Denmark, Sweden and Norway, and they changed from the silver standard to the gold standard.

In 1875, Italy suspended the coinage of silver on individual account. In the same year there was a suspension of the coinage of silver on account of the Dutch colonies.

By the law of August 2, 1892, Austria-Hungary changed from the silver standard to the gold standard. In June, 1893, British India suspended the coinage of silver. In 1895, Chile adopted the gold standard, and in the same year Russia, which had for some time been gathering gold, although a silver standard country, decided to coin 100,000,000 gold rubles ($78,000,000). (*U. S. Mint Report, 1895*, pp. 450–1.)

IV.

Gold Monometallism an Experiment.

From what has already been stated, it will appear that bimetallism formerly prevailed in the greatest commercial countries of the world, and that it prevailed in France and the United States until 1873. The present advocates of bimetallism are therefore not asking for something new. They are simply seeking a return to that which was the established policy of this government, and of other great commercial countries, during the greater part of the period covered by our country's history.

The period of twenty-three years which has elapsed since the change of legislative monetary policies covers a very small fraction of the world's monetary history. It has been a period of experiment with a new policy, initiated in 1873. It has continued long enough

for the value of the experiment to be determined. If the results have been beneficial to the world at large, and are likely to so continue, the experiment should be continued as the definite monetary policy of this and other countries. If, on the other hand, it has proved disastrous, then it should be, as quickly as possible, abandoned, and the policy which it displaced should be restored, with such improvement as may be possible.

V.

Effect of the Demonetization of Silver Upon the Relation of the Precious Metals to Each Other.

Statistics are available to show the value of silver, as measured in gold, or of gold as measured in silver, for more than 200 years, (see *Appendix*, Note 10), and these show the following facts:

From the year 1687 until the year 1872, inclusive, the highest value of silver, as measured in gold, was shown by the ratio of 14.14 to 1; the lowest value of silver, as measured in gold, was in the ratio of 16.25 to 1; and for 125 years out of the 186 years above mentioned, the ratio stood between 15 and 16.

After 1872, and down to the present date, the yearly average has shown a marked descent in the gold value of silver, with a slight temporary increase in 1890; and the lowest yearly average gold value of silver in the last twenty-two years was in 1894, when it stood at the ratio of 32.58 ounces of silver equal in value to one ounce of gold.

It should be borne in mind that the ratio of 16 to 1 means a gold price of about $1.29 per ounce for silver. The present price is about 68¾ cents per ounce, which means that it would now require thirty ounces of silver bullion to be equal to one ounce of gold bullion.

It is urged by gold monometalists that the decline in the relative value of silver during the past twenty-two years

is due to the great increase in the annual production of silver during that time (*Appendix*, Note 5).

It is evident to everyone that, in comparing the relative supply, from time to time, of articles not consumed in the using, the comparison must be made on the basis of the total existing stock. Each year's supply is a mere increment added to the vast supply already accumulated. No comparison, then, for a single year or for a few years, is of much value. A comparison based on the total output of several hundred years, however, is of great value, because it approximates and fairly represents the relative supply of the two metals in the total existing stock. But such comparison, as shown by statistics, demonstrates that the world's stock of gold has increased in greater proportion since 1872 than has the stock of silver.

The Director of the United States Mint (*Report, 1895*, p. 248), gives, from the most authentic sources, the world's product of gold and silver, from the discovery of America down to 1894, inclusive. He also gives, separately (p. 50), the world's product of these metals for the years 1873–94 (*Appendix*, Note 5). From these statistics the following facts are derived by very simple computations, to wit, that the world's gold product, 1493–1872, increased in the next twenty-two years nearly 42 per cent; that the world's silver product, 1493–1872, increased in the next twenty-two years only 37 per cent (*Appendix*, Note 6).

Relatively, there was an over-production of *gold*, and, other things being equal, gold should have fallen in value, as compared with silver.

Michael G. Mulhall, an eminent British statistician, in his "Dictionary of Statistics," gives the relative production of these two metals, by weight, for the period 1600-1890 (*Appendix*, Note 7), and he says that this table, "shows conclusively that it is a fallacy to suppose that the world is being flooded with silver." He adds: "If the production were, as compared with gold, to be of the

same magnitude as in the eighteenth century, we should require double the present quantity to be produced yearly." (*Dictionary of Statistics*, p. 308.)

In this connection it is interesting to note that the world's gold product in 1894 was 8,737,788 ounces, and the silver product 167,752,561 ounces, which was the greatest annual product of silver the world had ever known. (*Mint Report, 1895*, p. 50.)

This gives a product in the ratio of 1 to 19.2. If relative values of the metals were gauged by that relative product of 1894, silver would have been worth in that year, $1.07⅔ per ounce, in gold. Its actual average price in that year was less than 63½ cents per ounce.

The conclusion is inevitable, that the change in the relative value of the two metals is not due to any recent disparity of production.

There are other pertinent facts that bear upon the question, as will be shown by the following comparisons of gold and silver product.

For the twenty years preceding the demonetization act of 1873, and the twenty years following the enactment of that statute, the world's product of gold and silver may be represented by the following table:

The world's product of gold from 1853 to 1872, twenty years, was	2,383.9	million	dollars
The world's product of silver (coinage value) from 1853 to 1872 was	942.1	"	"
The gold excess of production during this period,	1,441.8	"	"

During this period, however, the relative value of gold and silver changed very slightly, the maximum gold price of silver being $1.36 per ounce, and the minimum gold price of silver being 1.32\frac{8}{10}$ per ounce, making the widest variance only 3$\frac{2}{10}$ cents per ounce.

In the next twenty years, however, we have the following remarkable condition:

1873 to 1892, silver product (coinage value)	2,347	million	dollars
1873 to 1892, gold "	2,157	"	"
Excess of silver	190	"	"

But during this period the maximum yearly average price of silver was $1.29 8/10 per ounce, and the minimum yearly average was 87 5/10 cents per ounce, making a variance of 42 8/10 cents per ounce.

If relative production is the cause, and the sole cause, of change in prices, we find from these figures this remarkable anomaly: That the excess of gold product in twenty years of 1,441 million dollars made a difference in relative value of only 3 8/10 cents per ounce for silver; but that in the next twenty years an excess of only 190 millions in silver product made a difference of 42 8/10 cents per ounce; in other words, by comparing these two periods, that less than one-seventh of the cause produced more than eleven times the effect.

A like illustration can be used, by comparing the effect of excessive (?) silver production, at different periods.

The Director of the United States Mint (*Report for 1895*, page 248,) informs us that the world's production of gold for the 100 years—1741–1840—was 61,065,067 ounces, and that the production of silver during the same period was 2,128,915,130 ounces. Here we have a silver product in weight nearly thirty-five times the gold product. Under the reasoning of those who attribute the depressed value of silver to over-production, the ratio of gold to silver during this period should have been 1 to 35, if it depended upon annual product, and the price of silver should have fallen to about 60 cents per ounce. The fact is, that the gold price of silver in 1741 was $1.38 5/10, and in 1840 was $1.32 8/10 per ounce.

The Director of the mint also informs us, in the same volume, that from 1871 to 1894, inclusive, the world's gold product was 136,719,751 ounces, and its silver product

2,339,207,244 ounces, or seventeen times, in weight, as much silver as gold. But in 1871 the price of silver was \$1.32$\frac{6}{10}$ (note its closeness to the price of 1840), and in 1894 it was 63$\frac{5}{10}$ cents per ounce.

Here, again, on the theory of annual over-production, we have less than one-half the cause producing more than eleven times the effect.

It is very clear that some other cause than relative production has operated in changing the price of silver. The true cause is readily found in the changes which have been made in coinage laws.

Those countries which have the gold standard and have mints have free coinage of gold. Most silver countries which have mints have free coinage of silver. As already stated, England had free coinage of silver and gold until 1816. France, and various countries of Europe, and the United States, had free coinage of both metals until 1873.

Under the policy of free coinage, the amount of coin circulation is regulated, as it were, automatically. If it is more profitable to have the metal in the form of coin, it goes to the mint and is converted into coin. If it is more profitable to have it in some other form, the coin itself will be melted up, and, therefore, an elastic coin currency is furnished, regulated by the demands of trade. If, as to either metal, however, this privilege is taken away, then at once the particular metal which no longer possesses the right of free coinage becomes a mere commodity, because it cannot be changed into coin, or coin of the same metal freely changed into bullion; and if, in addition to this, restrictions are placed upon its debt-paying power, then its value is still further reduced.

Let it be admitted that demand controls price, yet for the precious metals, gold and silver, money uses constitute the principal demand, and therefore chiefly determine value.

Cernuschi has well said: "Nature produces silver and

gold, but does not produce *money*. It is the legislator who attributes to one of the metals, or to the two conjointly, the monetary function."

If we take the estimate made by the Director of the United States Mint (*Report, 1895*, p. 40) of the total amount of gold and the total amount of silver money of different nations of the world, and compare that estimate with the total product of the metals since the year 1492, according to the statistics of the Director of the Mint, as already used, it is found that 47½ per cent of the world's gold product for that period still exists in the form of gold money, and that 40 per cent of the world's silver product during the same period remains in the form of silver money. This shows that nearly one-half of all the gold and two-fifths of all the silver that has been produced in the world since the discovery of America now exists in the form of money. So great a demand must be a controlling factor in fixing value. Its extent is such that relative values, as fixed by monetary statutes, under free coinage of both metals, must control relative commercial values.

But these figures, significant as they are, do not begin to measure the present force of the demand for the metals for money uses. The tremendous pressure of that demand in recent years is shown by mint statistics.

For the years 1873–1894, the net gold coinage of the world, *after deducting recoinages*, exceeded its net gold product by more than 170 millions of dollars. The amount of the coinage of this period was 102.8 per cent of the amount of the product.

Although we may assume that a great deal of the new gold went into the arts, yet such was the force of the monetary demand that the arts, from their accumulated stores, yielded up to the mints not only an equivalent amount, but also 170 million dollars more (*Appendix*, Note 8).

During the same period, notwithstanding restrictions on

free coinage in Europe and the United States, the net silver coinage of the world, *after deducting recoinages*, was 85 per cent of the amount of the world's silver product during the same period. It is apparent that the great force which fixes the value of the precious metals is the demand for monetary uses.

The force of this demand at once explains why, in twenty years, from 1853 to 1872, inclusive, the remarkable disparity in the production of the two metals had very slight effect on the price of silver, and that, during the succeeding twenty years, the variance was so great.

During the first of these two periods free coinage laws were in operation in the principal countries of Europe and in the United States, and silver and gold alike could be taken to the mints of those countries and freely changed into coin of like metal, and the operation of the great money demand for the precious metals kept the commercial ratio practically coincident with the statutory ratio.

Since 1873 this privilege of free coinage has continued as to gold, but has ceased as to silver, in many of the countries of the world, including those above-mentioned, which has the effect of making the great money demand for silver depend not upon the free operation of supply and demand, but upon the arbitrary action of governments.

A very striking example of the effect of a change of policy even in one country is illustrated by recent events. Free coinage of silver was in existence in Mexico and British India, and silver bullion could, at the demand of any person presenting it, be changed by the mints of those countries into coin of those countries. The United States was also a purchaser of silver, to the extent of 4,500,000 ounces per month. Notwithstanding the demonetization of silver in Germany, and the restriction upon free coinage in France and other countries of Europe and in the United States, yet the existence of free coinage of silver in British India and Mexico and the purchases of that

metal in the United States, kept silver at a price above 82 cents per ounce. It was the money demand for silver in these countries that kept the price even so high as that. But in the last of June, 1893, the government of British India, apprehending that the United States would soon stop the purchase of silver, and therefore diminish its value, to the detriment of India, thought to anticipate such action by changing the monetary policy of British India itself. They therefore changed the policy of that country by suddenly withdrawing the right of free coinage, and within forty-eight hours after the announcement of that change in the British Parliament, the price of silver fell from about 82 cents to 68 cents per ounce.

This is a striking illustration of the effect that our own change of policy has had, the difference being that when we changed our policy in the United States, to wit, in 1873, we were using paper money alone. No material amount of gold or silver money was in circulation, and the effect of the law was therefore not immediately felt. This legislative action in the United States brought about gradually a result similar to that which, by the government of India, was precipitated with the greatest suddenness.

Coinage history clearly demonstrates that the steadiness of the ratio between gold and silver, prior to 1873, was due to the fact that certain strong governments admitted both metals freely to their mints, to be converted into coin money, at a ratio of value fixed by law. The great disparity of value, and changes in commercial ratio which marked monetary history after 1873, resulted from the breaking of the bimetallic tie which had previously held the metals together. This was caused by legislative action. Its effect on the transfer of industries and commerce, and especially upon the prosperity of the United States, will be considered later. (*Post*, Chap. x.)

VI.

Value-Measuring Money.

No country is so isolated that its measurement of values—its prices—will not be affected by prices of like products elsewhere. The price at which Russian or Argentine wheat can be sold on the English or French market will determine the price at which American wheat can be sold on the same markets, and *vice versa*. While the prices realized by the respective producers may not be the same, owing to intervening elements of cost and sometimes local demand, yet the common price at which the surplus of product sells in common markets will determine the amount the producer will receive.

All values, however, are measured in money. Lord Liverpool says:

"The money or coin of a country is the standard measure by which the value of all things bought and sold is regulated and ascertained, and it is itself, at the same time, the value or equivalent for which goods are exchanged, and in which contracts are generally made payable." (*The Coins of the Realm*, ed. 1880, p. 9.)

International commerce involves international payments. The money of one country must be convertible into money of other countries. There must be some common medium of payment. Gold and silver are the only substances adapted for this purpose, and their use as money commenced at the dawn of history, and has increased to this day. One or both of these metals has been the standard of values in all commercial countries for centuries. If the circulation in any country consists of irredeemable paper money (as in Argentina to-day and as in the United States in 1870), then, while local prices will be measured in this paper, yet for all international transactions they would have to be converted into terms of the metallic standard money accepted by the outside

world, which money would therefore again determine values.

The result is, that the metallic standard money of the world is the ultimate measurer of world values.

If the world's stock of metallic standard money could be suddenly doubled, the result would be that the general level of prices would gradually rise, and, other things being equal, would ultimately be double what it was before, because the money equivalent of all things bought and sold would be twice what it had formerly been. So, if one-half of the world's stock of metallic standard money should suddenly be cast into the sea and be lost to the use of man, prices of all things would fall, for prices being measured in that money which remained, one half must serve the purpose which the whole had served before.

Professor Nicholson, of Edinburgh University, says: "The measure of values or the general level of prices throughout the world will be so adjusted that the metals used as currency or as the basis of substitutes for currency, will be just sufficient for the purpose." (*Money and Monetary Problems*, p. 101.)

The metallic standard money of the world is then the measure of values, and its quantity determines the general level of prices.

It is apparent that if all countries had both gold and silver as standard money, at a universally-accepted ratio of value between the metals, and if men could freely at the mints convert the metal into coin, and could again, without loss, melt up that coin, then the entire, combined mass of gold and silver in the world would determine the general level of prices. As it materially increased or diminished, in proportion to the demands of commerce, prices would rise or fall.

If the combined mass of gold and silver were, at a given time, thus the measure of the world's values, and then, by legislation or otherwise, all the silver should be

abstracted from that mass, and gold left as the only standard money, then the effect, of course, would be the same as if the entire mass had been cut down proportionately, and prices of all other things would fall accordingly.

How the principles thus illustrated have been applied in monetary history, and with what effect, we shall presently see.

VII.

BIMETALLISM IN THE PAST.

Prior to 1873 England was gold monometallic. Various countries were silver monometallic. Some countries, of great potency in the world's commerce, such as France and the United States, were bimetallic. Anyone could at any time take gold or silver to the French Mint and have it converted into coin, and this resultant coin was standard money. It would circulate in France at the legal ratio between the metals of 15½ to 1. The result was that the whole mass of the world's gold and silver was kept at approximately the same relative value.

Again, the figures of our Mint Report furnish the means of demonstration. For the years 1821–1840, the world's silver product was, in weight, thirty times as much as its gold product, and the value of the silver product was nearly twice the value of the gold product (*Appendix*, Note 9). Yet the highest yearly average ratio of value, in the money markets, was 15.95 to 1 (1821), and the lowest was 15.62 to 1 (1840). (See *Appendix*, Note 10.) It will be noted, in passing, that we have here the highest value (lowest ratio) of silver at the end of a period of great "over-production" of silver.

For the years 1851–1870, the world's silver product was, in weight, less than 5½ times the product of gold; and the value of the gold product was nearly three times the value of the silver product (*Appendix*, Note 9). Yet, during

this period, the lowest yearly average ratio of value was 15.19 to 1 (1859) and the highest ratio was 15.60 to 1 (1869). These figures disclose the remarkable fact that, notwithstanding this great "over-production" of gold, yet gold, as valued in silver, was somewhat higher in 1869 than it was ten years before.

Now, how is this constant steadiness in the relative value of gold and silver, during these forty years, to be explained? If other conditions had been the same as in the last twenty years, it is manifest that such excessive fluctuations in the relative supply of the two metals would have produced corresponding fluctuations in their relative values. There is no explanation, except that the open mint of France, ready at all times to convert either metal into standard money at a fixed, government ratio of value, maintained an equilibrium as to value, notwithstanding the tremendous fluctuations in the relative supply of the two metals.

This was the conclusion of the Royal Commission on Gold and Silver, in 1888, in Great Britain. That commission was composed of distinguished statesmen of Great Britain, to wit: Lord Herschell, G. C. B.; Rt. Hon. Leonard H. Courtney, M. P.; Lord Farrer; Sir C. W. Freemantle, K. C. B.; Rt. Hon. Sir John Lubbock, Bart., M. P.; Mr. J. W. Birch; Rt. Hon. Sir Louis Mallet, C. B.; Rt. Hon. A. J. Balfour, M. P.; Rt. Hon. Henry Chaplin, M. P.; Sir D. Barbour, K. C. S. I.; Sir W. H. Houldsworth, Bart., M. P., and Sir Samuel Montagu, Bart., M. P. Of these distinguished men, Lord Herschell was afterwards Lord Chancellor, and was at the head of the committee which in 1893 investigated the currency conditions of India; Mr. Leonard H. Courtney is the author of the excellent article on Banking, in the Encyclopedia Britannica; Sir C. W. Freemantle was formerly Master of the British Mint, and was a delegate from Great Britain to the Brussels Conference; Sir John Lubbock is well known as an eminent

writer; Rt. Hon. A. J. Balfour is the First Lord of the Treasury, in the present British cabinet; and Sir David Barbour has been Financial Secretary for British India. These men cannot be accused of ignorance, nor can it even be said that they would come to hasty conclusions on matters of great public importance. Yet these gentlemen were unanimous in the following statement:

"Now undoubtedly, the date which forms the dividing line between an epoch of approximate fixity in the relative value of gold and silver, and one of marked instability, is the year when the Bimetallic system which had previously been in force in the Latin Union ceased to be in full operation; and we are irresistibly led to the conclusion that the operation of that system, established, as it was, in countries, the population and commerce of which were considerable, exerted a material influence upon the relative value of the two metals.

"So long as that system was in force, we think that, notwithstanding the changes in the production and the use of the precious metals, it kept the market price of silver approximately steady, at the ratio fixed by law between them, viz., 15½ to 1. * * *

"The fact that the owner of silver could, in the last resort, take it to those mints and have it converted into coin which would purchase commodities, at the ratio of 15½ of silver to 1 of gold, would, in our opinion, be likely to affect the price of silver in the market generally, whoever the purchaser and for whatever country it was destined. It would enable the seller to stand out for a price approximating to the legal ratio, and would tend to keep the market steady at about that point." (Sections 192 and 193, *Final Report, Royal Commission on Gold and Silver, 1888.*)

The facts thus far stated lead us to this natural conclusion: That, through the bimetallic tie which united silver and gold, at a fixed ratio, both as standard money, in certain great commercial countries, the combined mass of gold and silver in the entire world became, in effect, the world's standard money. For example, barring expense of exchange and transportation, silver would not exchange anywhere for more or less gold than at the ratio fixed by those open mints, and gold or silver, either or both, could be used in international exchange, on this basis.

So that the bimetallism that existed in some countries prior to 1873 (hampered and restrained as it was by conflicting ratios) had the effect of making all values rest on the combined mass of the world's gold and silver.

Notwithstanding the facts and authority here cited, monometallists claim that France was not successful in maintaining her statutory ratio, from 1803 to 1873.

It is strange how discordant are the assertions of the two sides on this subject. The contradiction largely results from a misunderstanding or perversion of the meaning of opposing statements. Bimetallists do not claim that gold and silver circulated in equal quantity, or that there was no variance in their proportions in the circulation, or that a person could always, on demand, obtain gold coin for export in exchange for silver coin. But they do say that, notwithstanding the most excessive fluctuations in the production of the two metals, and although England, in the early part of this period, was attempting to establish a gold standard, and to escape from the burden of an excessive issue of paper money, while other neighboring countries changed from gold to silver and from silver again to gold, and from the single standard to the double standard, at ratios differing from her own, yet France kept the metals substantially at the statutory parity, not in France alone, but in the world at large. The record of her success during that seventy years, when compared with the record of the last twenty years, being after the bimetallic bond was broken, proves conclusively the steadying force of bimetallic legislation.

The history of the world is full of illustrations of the fact that it is diversity of ratios *under coinage laws* that is the great cause, if not the sole cause, for the exodus of one metal, rather than the other, from any country, and that the improvident change of these ratios, without regard to the coinage laws of other countries, has been the principal source of difficulty.

Among the old English laws there is an interesting statute prohibiting the making of contracts payable in gold. Its preamble recognizes the existence of the fact to which we are here calling attention. It reads as follows:

"ITEM—For that merchant aliens of late have taken in custom, that when they sell any of their merchandise to any person within the Realm, they will not demand nor receive for any payment for the same, any manner of silver, as they were wont, but only *gold* nobles, half-nobles and farthings, which from time to time they do carry out of the Realm into other *strange countries*, where they be changed *to their increase* and forged into other coins, so that they gain in the allay of every noble twenty pence," etc. And the act then proceeds to forbid contracts payable in gold. (8 *Hen. VI.*, Chap. 24, A. D. 1429.)

In the days of Sir Francis Bacon an inquiry was made as to why silver did not come to the mint, and Lord Bacon, as King's solicitor, was one of a committee reporting upon that subject. Lord Bacon says:

"The first proposition is touching the disproportion of the price between gold and silver, which is now brought to bed upon the point of 14 to 1, being before but 12 to 1. This we take to be an evident cause of scarcity of silver at the mint—but such a cause as will hardly receive a remedy; for either your lordships must *draw down* again the price of gold or advance the price of silver, whereof the one is going back from that which was *so lately done* and whereof you have found good effect, and the other is a thing of dangerous consequence in respect of the loss to all monied men in their debts, gentlemen in their rents, the King in his customs, and the common subjects in raising the price of things vendible." (Basil Montagu's *Works of Lord Bacon*, Vol. 2, p. 282.)

Again, one hundred years later, there was a scarcity of silver at the English Mints. Sir Isaac Newton was Master of the Mint, and made a report on the subject, pursuant to an "order of the Lords of the Treasury," August 12, 1717.

At that time the legal ratios between gold and silver varied in different countries, as follows:

Portugal	14.22
Spain	15.16
France	14.46
Holland	14.80
England	15.17

A glance at this table tells *us* that it was inevitable that silver should leave Spain and England and go to Portugal and France; that gold would leave the latter and go to the former countries. Newton correctly diagnosed the disease and prescribed the bimetallic cure. He says;

"It appears, from experience as well as by reason, that silver flows from those places where its value is lowest in proportion to gold, * * * and that gold is most plentiful in those places in which its value is highest in proportion to silver. * * *

"The demand for exportation arises from the higher price of silver in other places than England in proportion to gold; that is, from the higher price of gold in England than in other places in proportion to silver, and, therefore, *may be diminished by lowering the value of gold in proportion to silver.*"

As to the specific remedy as applicable to English coins, he says:

"There seems nothing more requisite than to take off about 10d. or 12d. from the guinea, so that gold may bear the same proportion to the silver money in England which it ought to do by the course of trade and exchange in Europe." (Jevons—*Investigations in Currency and Finance*, pages 334–5.)

Now, with these principles, and with these facts of history to guide us, let us consider the experience of France in the present century.

In 1803 she adopted bimetallism pure and simple at a ratio of 15½ to 1, making both metals full legal tender and with equal right of unlimited coinage. She maintained this statutory relation of the metals till 1873.

Now note the disturbing causes arising from the laws of other states.

England was bimetallic at 15.57 to 1 until 1816 and thereafter was gold monometallic. During the early part

of this period she was struggling under a burden of paper money, urgently pressing to obtain gold to take the place of paper.

The *United States* was bimetallic at the ratio of 15 to 1 until 1834, and thereafter at the ratio of 16 to 1; but all specie payments were suspended in 1862.

Holland was silver monometallic until 1816; then bimetallic at the ratio of 15.87 to 1 until 1847, and after that silver monometallic again.

Belgium was bimetallic until 1850, then silver monometallic until 1861, when she came bimetallic again, and afterwards entered into the Latin Union.

The *German States* had varying monetary systems but became silver monometallic in 1857 and so continued till 1871, and afterwards became gold monometallic.

Notwithstanding these disturbing elements, the bimetallic par of France was so well maintained that the variance between gold and silver did not exceed in magnitude the variation of exchange between gold-using localities and the premium on gold did not in France at any time exceed 2.1 per cent, and on only a few days during the whole period was so high as 2 per cent.

In this connection, it must be borne in mind that while the Bank of England, to prevent the exportation of gold, raises the rate of discount (witness the increase in 1893 from 2½ to 3, then to 4, then to 5 per cent for this purpose), yet the policy of the Bank of France has been to keep down the rate of discount and produce the same effect by charging a premium on gold.

During the last week of August, 1893, the Bank of England rate of discount was 5 per cent; that of the Bank of France at the same time was 2½ per cent; but the latter was charging a premium of 12 centimes on every English sovereign it sold and charging more for French napoleons. (*London Economist, August 26, 1893,* page 1032.)

When we consider the experience of France from 1803 to 1873, with attendant conditions, and compare that history with the experience of the last twenty years, there seems no escape from the conclusion that France was a triumphant illustration of the success and value of bimetallism.

The bimetallic tie had also another important effect. The history of the metals shows that the two do not contemporaneously increase in supply in the same proportions. If one metal alone were the standard, and all values had become adjusted thereto, then a great increase of production of that metal would, for a time, advance prices and stimulate productive activity. When the supply fell off, all industry would be relatively depressed, and the diminution of supply would have all the effect of a contraction in the volume of money. When both metals are used as standard money, the effect of these fluctuations is not only distributed over a larger mass, but the increase of the one will tend to counterbalance any contemporaneous deficiency in the supply of the other.

Professor W. Stanley Jevons illustrates the effects of bimetallism by this comparison, which has been frequently quoted.

"Gold and silver, free from the action of a legal ratio, are like two unconnected reservoirs of water, each liable to be raised and lowered in level by various accidents. Establish a communication between these reservoirs and then each new supply spreads itself over a double area, and each new demand is supplied with less effect upon the general level. The legal currency ratio of 15½ to 1 actually does establish a communication of this sort between the reservoirs of gold and silver in the world." (*Investigations in Currency and Finance*, p. 310).

The bimetallism which existed prior to 1873, notwithstanding the then opposing influences already mentioned, did have the effect of combining all the gold and all the silver of the world into one volume for the measurement

of values. But the connection between the two was abruptly broken by the monetary legislation of 1873 and subsequent years.

VIII.

THE EFFECT OF DEMONETIZATION ON PRICES.

If our argument thus far is well founded, then the natural conclusion must be that fluctuations in the volume of metallic standard money would affect prices, and that, as the volume of value-measuring money decreased, values would fall.

This deduction of reasoning is now supported by established fact. In 1873 the United States demonetized silver. Germany completed a like change of policy, resorting to the single gold standard. As we have already said, other countries followed this example. France closed her mints to the free coinage of silver—France, that had maintained the parity of the metals through the entire century. The bimetallic tie was broken. These countries, which controlled the bulk of the world's commerce, landed upon a single gold standard. The combined mass of the world's gold and silver no longer fixed the world's prices.

Let us again resort to that fertile field of information, the United States Mint Reports. The last report (1895, p. 40) estimates the total stock of gold money in the world to be about 4,087 millions of dollars, and the stock of silver money 4,070 millions of dollars. Of these amounts, we find that there is about 2,450 millions of gold and 2,550 millions of silver in those countries which since 1872 have either demonetized silver or stopped its free coinage. If bimetallism now prevailed in those countries the whole 5,000 millions of money would be the basis for fixing values; but as the effect of this legislative action has been to make gold alone the standard money in those countries, the 2,450 millions of dollars in gold must substantially do the

work, as primary money, which otherwise would have rested on the entire mass. The inevitable result has followed.

Eminent economists and students of prices have devised methods of registering the average rise and fall of prices of commodities, by what they call "index numbers." These index numbers have been kept for many years. The Economist index number, at the end of 1873 was 2,947; in July, 1894, it had fallen to 1,974, and The Economist stated, editorially, that this was the lowest it had registered in fifty years. It has fallen much lower since then. In June, 1896, it was 1,947. Sauerbeck's index number of 45 principal commodities uses 100 as representing the average of prices of those commodities for the years 1867 to 1877. Using this as a standard, his index number in May, 1896, was 60.1. (*Appendix*, Note 11.)

It is desirable to take these indexes of average prices, from European and especially English sources, as we do here, for the reason that, more than any other place, England is free from such disturbances of prices as arise from tariff laws. Local conditions there have the least effect, for in the English market the great staples of the world compete, from whatever sources they come. That market can therefore best represent the general rise or fall of values, resulting from general, as distinct from local, causes.

The fluctuation in price of a single commodity is not usually a test of the existence of a general cause for the depression or increase of prices, because that commodity may be affected by special conditions of quality or of supply and demand, not affecting commodities generally. An average for a large number of commodities is not subject to this objection. If, however, as to any single, great staple, there is an unusual, persistent and long-continued fall in price, we naturally look for some general and persistent cause.

The price of wheat has shown such persistent fall. Mr. Sauerbeck, in making up his index numbers, gives us English average prices per imperial quarter, which we convert into terms of United States money per bushel, with the following result:

Average	price,	1867–1877	\$1.75	per bushel.
"	"	1878–1887	1.36	" "
"	"	1885–1894	1.04	" "
"	"	1893	.86	" "
"	"	1894	.73	" "

The total world's wheat product of 1890 was 2,131 million bushels; for 1892, it was 2,125 million bushels. (*Statesman's Year Book, 1893*, page xxix). Population must have in the meantime increased. A diminished supply, with an increased demand, should have advanced the price. Yet, on the common English market, the price at the end of 1892 was much less than that at the end of 1890. The average price of 1893 was very much less than that for 1891. (*The Economist, Commercial History and Review, Feb. 17, 1895*, p. 17).

Almost every great product of farm or factory, in like manner, shows a tremendous decline since the year 1873; and this decline cannot, certainly for the last four years, be attributed to over-production. Yet in the last four years values have fallen with increased rapidity.

Any reliable American statistics will show the same facts. The recent tremendous fall of all values, however, is a matter of common knowledge; it does not require statistics to establish it.

There is one simple, clear and absolutely conclusive explanation of this general fall of values. It is that, through the legislative action of governments in reducing the volume of value-measuring money, the prices of all things which must be measured by that money have fallen, and must continue to fall, so long as the effect of this legislative action shall continue.

It is sometimes said that the great fall of prices that has marked the last few years is the result of "over-production" of all the great staples. This argument was made with much force, some eight years ago (*Recent Economic Changes*, D. A. Wells); but in the light of later events it has ceased to have weight. Certainly the past four years have not been marked by any great increase of production of commodities in the gold-using countries, and least of all in the United States.

In considering the prices of world staples, we should consider the world product; yet some statistics of the United States, which anyone can find (see *World Almanac, 1896*), tell a significant story. The average yearly wheat product of the United States for the years 1890–1 was 505,000,000 bushels. The average export price in those years was 88 cents per bushel. The average yearly product for the years 1893–4 was 428,000,000 bushels; the average export price was 73½ cents per bushel.

So as to cotton. For the years 1890–1 the average yearly product was 8,000,000 bales; the average export price, 10 cents per pound. But in 1893–4 the average yearly product was a trifle over 7,000,000 bales, and the average export price was 8 1/10 cents.

Those who use this argument of "over-production" dwell with great emphasis on the improvements and developments made in the world since 1872. They say little of the like advance in the previous twenty-three years, which was even more remarkable, but with very different results.

We republish, in the Appendix (Note 12), from the Bimetallist (Vol. 1, p. 136) a diagram prepared by Sir Guilford Molesworth, from the most authentic sources. By this diagram it appears that from 1849 to 1872 the production of cotton increased 133 per cent, but that its price, instead of falling, actually rose 50 per cent; that between 1872 and 1894 the production increased only 43 per cent,

while the price fell 66 per cent. The diagram as to wheat shows similar facts.

The diagram as to commodities generally (based on Mr. Sauerbeck's "Index Numbers" and "Movement of Quantities"), shows, during the first period, an increase of production of 70 per cent and a contemporaneous advance of prices of 45 per cent; while in the second period there was an increase of production of only 35 per cent, with a fall in values of nearly 50 per cent.

The first of these periods was marked by a great increase in the volume of metallic standard money. The second period was marked by a tremendous decrease of the volume of such money, such decrease being brought about by legislative action.

The theory of "overproduction" as a cause for present falling values is clearly untenable.

IX.

The Effect of Falling Values on General Welfare.

Experience and reason alike teach us that a persistent and long-continued fall in prices is injurious to both debtor and creditor, to both producer and investor, to both employe and employer. It is injurious to all, except that very small class whose fixed income, consisting of a certain and unchanging amount of dollars per annum is based on a class of securities, the safety and certainty of which cannot be affected by the most violent monetary disturbance.

The farmer who, in 1891, borrowed $5,000, by mortgage on his land, to be paid in 1896, not only found, each year, increasing difficulty in the payment of the interest charge, through depression in the value of his products, but at the maturity of the principal he finds that it takes very much more of the product of his labor to satisfy the demand of his creditor, than it would have required at the inception

of the debt. The merchant or manufacturer who, six years ago, increased his working capital by borrowing $10,oco, finds that to pay it now will require, of his product of goods or labor, that which at the inception of the debt was worth at least $12,500.

Railroad and other corporations that, in 1873, issued their twenty-five or fifty-year bonds, not only find the interest on their bonds annually taking a larger proportion of their earnings, but the principal has almost doubled, as measured in the great staples of commerce.

In a pamphlet published in July, 1893, the writer, in discussing the probable effect of repealing the Sherman law, without a free coinage substitute, used the following language:

"The funded debts of the railroads of the United States amount to 5,463.6 millions of dollars (Poor's *Manual, 1893*, p. i,)—a sum, by the way, exceeding the total amount of gold coin in tbe world by more than 1,700 millions of dollars. The interest charge on this debt, at 4 per cent, would amount to 218½ millions of dollars annually. However much the value of the gold dollar may appreciate, and all other values decline, the number of dollars to be paid, principal and interest, will remain the same; but reduced values and prices and the depression of trade must make less traffic, lower rates and reduced earnings. Moreover, many of these and other large mortgage debts are made payable, principal and interest, in 'gold coin of the present standard of weight and fineness,' preventing any relief from laws making paper, silver or anything else 'legal tender.' The full effect of the enhanced value of gold will fall upon these enterprises, and railroads furnish but an illustration of vast interests similarly affected.

"In the event of the certain appreciation of gold, resulting from the proposed action, what would save us from universal bankruptcy?

"While large corporations and the stockholders of large corporations would be great sufferers under the proposed policy, yet their suffering is not for a moment to be compared with the universal distress that would affect farmers, whose property is mortgaged, and the immense number of small debtors, whose obligations will become due three, five and ten years hence. It is among the great numbers which constitute this class that intense distress must prevail."

Have not these predictions (if they may be so called) been fulfilled? It has been, throughout the West at least, a period of foreclosure of farm and city mortgages. An immense quantity of real estate has changed ownership. That by means of which the debtor had, under falling prices, made a scanty subsistence, has now become an unprofitable holding, and, in many instances, an expensive burden in the hands of the former creditor.

After the lines above quoted were penned, numerous large railroad systems in the United States passed into the hands of receivers. On July 1, 1894, railroad companies having a total capitalization of 2,500 million dollars, and a bonded debt of nearly an equivalent amount, had succumbed, and their assets were being administered by the courts. An interesting statement on this subject by the Interstate Commerce Commission will be found in the Appendix (Note 13). These companies are now going through the process of reorganization. Almost invariably the scheme of reorganization involves not only the reduction of interest, but a scaling down of the principal of the old bonded debt, entailing in many cases a great loss to the *creditors*, the holders of the original obligations, with an utter destruction of the stock investment.

The baneful effect of these conditions is not confined to the debtor, although he is the greatest sufferer. The profits of the lender of money depend upon the assurance of his interest and the certainty of the return of his principal. A general inability of the debtor to pay, and the general depression in the value of securities, pulls many a "creditor" down in the common ruin.

The writer is not to be understood as contending for any policy intended to reduce the burden of debtors, at the expense of creditors. The ideal monetary policy would be such as to preserve absolute equality in the amount of sacrifice required to satisfy the same sum at the maturity as at the inception of the debt.

Recent monetary policies have, however, caused the most violent disturbance of such equality ever known in financial history. If the combined volume of gold and silver in the world could continuously furnish the measure of values, there is every reason to believe that as near an approximation to the equality above mentioned would be reached as the varying conditions of the world's production and commerce will permit.

There is, however, only a very small part of the "creditor class" who can derive benefit from a long-continued and permanent fall in values. There are doubtless some classes of securities which, so far as human reason can determine, will continue indefinitely to yield their regular return. Such are the government securities of the strong nations; it is probably true of some state and municipal obligations—not of all; and it may be true of some corporate securities. These long-time, reliable, certainly-solvent securities of the world are not, relatively speaking, largely distributed. The comparatively few holders of these securities have in the past obtained an unearned increment of tremendous extent in the value of their incomes, by the great reduction in values of things purchasable. This has resulted, as already shown, from the demonetization of silver and the restriction of the metallic basis of values.

The first-mortgage, four-per-cent bonds of the West Shore Railroad Company run for 475 years. They are guaranteed, principal and interest, by the New York Central. These ought to be the very best of railroad securities. The holder of $100,000 in these bonds gets his $4,000 per annum interest, however much the value of that $4,000 may increase; and if, through legislative contraction of the volume of money, its purchasing power is doubled, then this creditor is certainly the gainer. But his gain is the result, not of his own merit or effort, but of legislative action.

But the influence of the persistent fall in values, upon the relations of debtor and creditor, is of small moment as compared with its effect on productive industry, on which rests the very structure of society. Reason teaches and experience demonstrates, that a long-continued period of rising values, resulting from an increased volume of the world's metallic standard money, stimulates industrial activity, diverts human energy into new channels of enterprise, widens the range of employment, develops inventive genius, and, abundance begetting leisure, promotes intellectual activity, manifested in the development of science, art and literature.

On the other hand, a persistent fall in values depresses energy, restricts effort, and throttles industry. The enterprise which had been profitable becomes less so, or can be continued only at a loss, and must soon stop. Men are thrown out of employment. Hours of labor for those who remain are lessened. Finally, wages also fall; poverty and distress multiply. Such conditions, long continued, undermine the very foundations of the social fabric.

It has sometimes been said that the laboring man is benefitted by a fall in values; that wages have not fallen, as other values have, and that the laborer has a larger margin left, out of his wage, by reason of the lowered price of the things he buys.

When applied to a long-continued fall in values, resulting from monetary contraction, this argument is fallacious. Statistics support, what both employes and employers now know from recent experience—that a fall in the total wage closely follows the fall of all other values. It pursues, however, a different channel. Nominally, wages may be, and usually are, maintained at the old level, after other values have gone down. Especially is that true in this day, when labor organizations have acquired strength and have been skillfully managed for the mutual protection of their members. But even they cannot control the inex-

orable law of supply and demand, in the relation of employment furnished to employment wanted. First the number employed is diminished; the total wage is reduced, not by cutting down individual wages, but by reducing the number of recipients; the ranks of the unemployed multiply, those of the employed diminish; then hours are lessened, and, while the hourly wage of the individual may continue unchanged, the weekly or monthly receipts grow less. Finally, wages themselves fall, to meet the level of all other values. As between labor and commodities, in the general decline, the difference is in the process, not in the fact. There is and can be nothing so useful for labor as an increase in the demand for it. This can come only from the growth, not from the diminution, of industrial activity.

X.

The Effect of Silver Demonetization in Transferring Industries to Silver-Using Countries.

During the first seventy years of this century, through the parity of the metals, maintained in bimetallic countries, the money of Europe was, in effect, money in Asia. The money of China and Japan was money in Europe and America. The money of each metal-using country was practically the money of all; because the intrinsic value of each gold or silver coin was the same as its nominal value. When the system of bimetallism was broken down, this condition, as to money, changed. The silver of Japan, China and Mexico became a mere commodity in the gold-using countries, subject to daily fluctuations in value. The gold of Europe and the United States became a mere commodity in the silver-standard countries, subject to like fluctuations of value. As the gold price of silver fell from about $1.29 per ounce (the American par), in 1873, to

about 63 cents per ounce, in 1894, the effect was to give a constant bounty to the producer in the silver-using countries, on those articles competing in a common market with like products of gold-using countries.

The competition of Indian wheat with American wheat, for twenty years after 1873, furnishes an excellent illustration. India was a silver-standard country. Its coin of account, the rupee, is of silver, and while it continued, during all this time, the measure of values in India, and its intrinsic value there was the same as its nominal value, yet its value was constantly changing in Europe and America.

When silver was at par with gold, the rupee was worth about two shillings in London, and about 48 cents in the United States. English quotations of wheat are per imperial quarter, of eight bushels. Let us illustrate the effect produced by a fall in the gold price of silver. Assuming that, with silver at $1.29 per ounce, the price of wheat on the London market is 50 shillings per quarter, and that afterwards, with silver at 64½ cents per ounce, the price of wheat has fallen in London to 27½ shillings per quarter, the results, as to American and Asiatic producers respectively, will be shown by the following table:

	Price, Per Bushel.	Price, Per Quarter.	Transp'tn and Comm'n. 25 per cent.	Total Cost.	Price to London Dealers.
SILVER AT PAR—($1.29 PER OUNCE).					
British India	2.50 Rs.	20 Rs.	5 Rs.	25 Rs.	50s.
United States	$1.20	$9.60	$2.40	$12.00	50s.
SILVER AT FIFTY PER CENT—(.64½ PER OUNCE).					
British India	2.75 Rs.	22 Rs.	5.5 Rs.	27.5 Rs.	27.5s.
United States	.66	$5.28	$1.32	$6.60	27.5s

This table shows that, as between the Indian and American producer, each competing in the common English market, the former has all the benefit of rising values, the latter suffers the bitter hardship of falling values. By the table as used, the Indian price *rises* ¼ of

a rupee (about 12 cents) per bushel; at the same time, the American price falls 54 cents per bushel. Yet in each instance the two competitors sell, as they must, at the same price, in the common market. For simplicity of illustration we have in this table used approximate prices only. A like table, based on actual prices of wheat and silver in the English market, would show like results.

It is quite apparent that a rising market in India, as against a falling market in the United States, would greatly stimulate the production of wheat in India. It quickly had that effect.

In 1872, India exported only 637 thousand cwt.; in 1886 she exported 21 million cwt. (Cernuschi, "*The Rupee at 18d*"). In the fiscal year 1891–2 (in which, however, the crop was exceptionally large) her exportation arose to 30 million cwt. (*London Economist, Trade Review, June 9, 1894*).

Similar illustrations might be adduced, as to numerous products of agriculture and manufacture, which, exported from silver-using countries, compete in common markets with like articles produced by us.

We can take another view of the matter, borrowing an illustration from Cernuschi. Let a bale of American merchandise be sent to Yokohama, on which, if $12,000 be not realized, it is a losing transaction. At the time of the bimetallic par, with the Japan yen equal to one dollar, the amount is obtained if the bale be sold for 12,000 yen. With the yen at 60 cents (silver 72 cents per ounce), the goods must sell for 20,000 yen in order to realize the $12,000.

Let a bale of Japanese goods be sent from Yokohama to the United States, on which, if 12,000 yen be realized, it is a profitable affair. With the yen at one dollar, the amount would be obtained by selling here for $12,000. With the yen at 60 cents, the 12,000 yen will be realized by selling here for $7,200.

The price of the American goods must be advanced 66 per cent in Japan, in order to obtain the same profit as before. The Japanese goods may be lowered in the United States 40 per cent and the same profit be still obtained.

This, it will be observed, is entirely independent of any change in the scale of wages in either country. The advantage derived by Japan, as here illustrated, is in addition to any which may result from "cheap labor;" it comes solely by reason of the fall in silver. With such a tremendous advantage in favor of the Japanese producer, is it strange that he is now beginning to undersell the American manufacturer, even in our own market, and this, too, after surmounting the wall of a high tariff.

Now, what does all this mean, in practical effect, as demonstrated by experience?

Prior to 1873, the world's commerce and the developments of its interests had become established under a monetary system which made the nominal and intrinsic value of all gold and silver money practically the same, by whatever country issued. The bimetallic par, as shown by the table of ratios in the Appendix (Note 10), had been (comparatively speaking), substantially maintained for 200 years. The enterprise and intelligence of the Western races had built up the industries of the world, in Europe and the United States. But now, by the breaking of this bimetallic bond, the same industries can be *more profitably* maintained in Japan, China and Mexico. This is the inexorable logic of the monetary legislation which has separated the metallic moneys of the commercial world into two classes, silver in one part of the world, gold in the other. This is why the silver-using countries are at this moment at the high tide of prosperity, while we are in the throes of hard times. But, much more than this, a revolution in the world's commerce is moving on, with tremendous rapidity. Not only have natives of these foreign lands discovered their opportunity and commenced to take

advantage of it, but Englishmen and Americans, believing that they can use their capital more profitably in China, Japan and Mexico, are themselves building mills and establishing industries on foreign soil. There is in progress a great movement of commerce and industry from Europe and the United States to Mexico and the Orient.

In 1890, Japan's *export* trade was 56 million yen; in 1894, it was 113 million; *increase*, 102 per cent.

In 1890, China's export trade was 87 million haikwan taels; in 1894, 144 millions; *increase*, 65 per cent. (*Appendix*, Note 14).

The export trade of Mexico (excluding precious metals), was 26 million dollars in the fiscal year 1891–2; in the fiscal year 1894–5, it was 38 millions; *increase*, 46 per cent.

In 1890, the export trade of Great Britain (the United Kingdom), including exports of foreign and colonial, as well as British produce, was 328 million pounds sterling; in 1894, it was 274 millions; *decrease*, 16 per cent.

In 1890, the export trade of the German Empire was 3,409 million marks; in 1894, it was 3,051 million; *decrease*, 10 per cent.

In 1890, the export trade of France, including its "general" and "special" commerce (*Appendix*, Note 15), was 8,593 million francs; in 1894, it was 7,203 millions; *decrease*, 16 per cent.

In the United States, the stimulus of an increased volume of circulating medium, based on deposits of silver in the Treasury under the operation of the Sherman Act (July 14, 1890) resulted in an increased product of domestic merchandise for export, the volume of which, in 1892, reached its maximum, to wit, 1,016 million dollars. All expansion of the circulating medium ceased in 1893. In the meanwhile, the secretaries of the Treasury (Republican and Democratic) surrendered the option given them by law, of redeeming Treasury notes in silver, and gave to all who should present them the right to demand gold

alone, thus immensely reducing the metallic basis of our paper circulation. Under these influences, the United States quickly felt the effect of the general downward movement. In 1895, our exports of domestic merchandise were 793 millions of dollars, a decrease, as compared with 1892, of 22 per cent.

These statistics are all taken from the *Statesman's Year Book, 1896*. Let us put the results into a table:

			Export Trade.
Silver Standard Countries:			
Japan:	1890–94.	Increase	102 per cent.
China:	1890–94.	"	65 " "
Mexico:	1890–94.	"	46 " "
Gold Standard Countries:			
Great Britain:	1890–94.	Decrease	16 " "
Germany:	1890–94.	"	10 " "
France:	1890–94.	"	16 " "
United States:	1892–95.	"	22 " ".

The "merry war" goes on apace. The world's commerce is moving from its old anchorage into new waters. "The yellow man with the white dollar is fast outstripping the white man with the yellow dollar."

XI.

How Gold Monometallism Came About.

In view of the terrific consequences which have flowed from the demonetization of silver, and the general adoption in the Western world of the single gold standard, the question naturally arises, Why were these changes in the monetary standard made?

It has been said by gold monometallists that it is the result of evolution in money, and that, as the world advanced from a money consisting of cattle or other commodities, like the "tobacco money" of Virginia, in the early history of the American colonies, through copper and

their use as money, of silver and gold, through the development of civilization and the "survival of the fittest" gold has in this manner become the sole standard of the most enlightened nations.

Again, it is said that the demonetization of silver and the resort to a single gold standard, commenced with "the enlightened" nations of Europe, and that the United States have followed in their footsteps.

[illegible] Silver and gold [illegible] money from very ancient times [illegible] commercial [illegible] In any specific period [illegible] of one metal or [illegible] purposes, has been [illegible], and through the [illegible] of the time [illegible] silver [illegible] and the "most enlightened nations" [illegible] remain [illegible].

Prior to 1873, when the world was already considerably "enlightened," there had been no general movement towards the gold standard. England, it is true, had adopted [illegible] but the [illegible] of France across the Channel still maintained the equilibrium between the world's gold and silver as already explained, and therefore the action of England did not materially affect the relation of the metals.

It is not true that the modern policy, which first assumed the form of legislative action in 1873, was inspired by the "enlightened nations of Europe." On the contrary, it was initiated by the United States.

The responsibility for this change of monetary policies, which has affected the weal or woe of millions of the human race, rests more than on any other one person, upon a [illegible] in the United States who is still prominent in public affairs.

Let us take a brief glance into the documentary history of the last thirty years.

In 1867, a world's fair, or Universal Exposition, was held in Paris. During its continuance, and upon the invitation of the Emperor of France, a monetary conference was held at Paris, for the purpose of considering the practicability of a unification of coins. It was not called for the purpose of considering the relative merits of the single or the double standard, or for making recommendations upon that subject. It was for the purpose of establishing "equations between some of the monetary types of gold or silver" of the countries which should participate. As indicated in the invitation, it was for the purpose of extending to the great commercial countries the principles of the Latin Union, which had been previously formed, and which was in fact thoroughly bimetallic in the moneys it had established.

This conference met on the 17th day of June, 1867, at Paris. Mr. Samuel B. Ruggles, who was already at Paris, in the character of "a scientific commissioner of the United States to the Universal Exposition," was appointed to represent the United States at this conference.

Senator John Sherman was in Paris in May of that year. On the 18th day of May, 1867, in answer to a letter from Mr. Ruggles, Senator Sherman wrote, from the Hotel Jardin des Tuilleries, a letter which was afterwards exhibited to the conference, and had great influence upon its deliberations. In this letter, among other things, he said, speaking of the desirability of a gold unit of coinage for the different countries:

"As the gold five-franc piece is now in use by over sixty millions of people, of several different nationalities, and is of convenient form and size, it may well be adopted by other nations as the *common standard of value;* leaving to each nation to regulate the divisions of this unit, in silver coin or *tokens*.

"If this is done, France will surely abandon the impossible effort of

making two standards of value. Gold coins will answer all the purposes of European commerce. A common gold standard will regulate silver coinage, of which the United States will furnish the greater part, especially for the Chinese trade." (*Ex. Doc. No. 14, Senate*, p. 108; 40th Congress, 2d Session.)

We have, then, here John Sherman, who was, at the time, chairman of the the Finance Committee of the Senate of the United States, urging the adoption of a single gold standard, the reducing of silver coins to mere token money, and stating that gold coins will answer all the purposes of European commerce, while he vigorously asserts that the double standard is an impossibility.

The sentiment expressed in this letter was earnestly advocated by Mr. Ruggles, in the conference. The result was that the conference voted in favor of an "exclusive gold standard," as a basis for attaining a unification of coinage. (*Ib.* 46.)

In the report of this conference, made to the United States by its representative, this recommendation was the first of the several points presented. The unification of coins contemplated by that conference, and for the promotion of which it was convened, has never, to this day, been accomplished. The single gold standard, mainly through the influence of Senator John Sherman, was adopted five years later.

In 1868 a bill was introduced in the United States Senate, known as Senate Bill No. 217, in relation to the coinage of gold and silver, and another one, Senate Bill No. 412, to promote uniformity of coinage between the moneys of the United States and other countries. These bills were the direct outgrowth of the Paris Conference of 1867.

Mr. Sherman, as chairman of the Finance Committee of the United States Senate, presented a report upon these bills, recommending, in accordance with the plan proposed by the Paris conference, the adoption, among other things, of "a single standard, exclusively of gold," and, speaking

in this report of the action of the conference of 1867, he says:

"The single standard of gold is an American idea, yielded reluctantly by France and other countries where silver is the chief standard of value."

Speaking of the proposed adoption of the 5-franc gold piece as the unit, he says:

"France, whose standard is adopted, makes a new coin, similar to our half-eagle. She yields to *our demand* for the *sole standard of gold.*" (See *Rep. Com., No. 117, Sen.* 40th Congress, 2d Session.)

In that report Mr. Sherman argues strenuously for a single standard, exclusively of gold, and, after discussing the other phases of the proposed legislation, he says:

"These reasons induce your committee to earnestly urge the adoption by the United States of the general plan of the Paris Conference." (*Ib.*)

This, it will be observed, was within one year after the meeting of the Paris Conference of 1867, and five years before the final demonetization of silver in the United States, and before any legislative action had been initiated in any European country upon the subject.

The 40th Congress adjourned without putting Mr. Sherman's suggestions into the form of law.

In the 41st Congress, and on April 28, 1870, Senator Sherman introduced another bill, "revising the laws relative to the mints, assay offices and coinage of the United States." This bill provided that gold should be the single standard of value. It discontinued the coinage of the silver dollar, and provided that the subsidiary silver coins should be legal tender only for sums less than one dollar.

Here was a very radical demonetization act, which Mr. Sherman introduces and urges, following up the policy outlined in 1867 and urged by him in the previous Congress. This bill, so introduced by Senator Sherman, passed the Senate of the United States on January 10, 1871.

At that time the German Empire had not been created and France had taken no new legislative action.

Now, for a moment let us look abroad. The German Empire dates from April 16, 1871. On December 4, 1871, more than three years after Senator Sherman's initiation of legislative action in the United States Congress, and nearly a twelve-month after his bill creating a single gold standard had passed the Senate of the United States, Germany passed an act which may have, indeed, looked forward to an ultimate gold standard, but which did not provide one. It provided for the coinage of gold, which should be full legal tender. It did not provide for free coinage of gold, but the amount of gold coinage was at the discretion of the Chancellor. It left the silver of the German states as full legal tender. It had previously been the only legal tender. Indeed, the very provision which gave the legal tender quality to the new gold was by a comparison with existing silver. It reads as follows:

"Section 8. All demands which by law are paid or which may be paid, in the silver coins of thaler currency or the South German currency or the Lubeck or Hamburg courant currency, or in the thalers of the gold Bremen currency, can, to a like extent, be paid in Imperial gold coins." (*Appendix*, *Report of the United States Monetary Commission*, p. 184).

Mr. Sherman's bill, which had passed the Senate, did not become a law at the 41st Congress; and at the 42nd Congress, two bills, of like character, were introduced into the House, and one of them (*H. R. 2934*) passed the House and went to the Senate, where Mr. Sherman led in its advocacy. There is hardly an allusion, however, in the debate, to the significance and possible effect of a change of monetary standard. This bill, having passed the House, was received in the Senate of the United States for action, on May 29th, 1872.

Now let us again look abroad. In December, 1872, pending these proceedings in the United States Congress, the Scandinavian kingdoms, Sweden and Norway and Denmark, following out the suggestions of the conference of 1867, and stimulated, doubtless, by the action pending

for the past four years in the Congress of the United States, made a convention providing that those countries should adopt gold as the basis of a common system of coinage, with the use of silver and metal of a less value, for smaller coin.

House bill No. 2934, above mentioned, on the 12th day of February, 1873, became a law of the United States, and is known as our "Demonetization Act of 1873."

At this date the gold standard had not been adopted in Europe or in any country, subsequent to the conference of 1867. So that in legislative action, as well as in legislative effort, the United States was the initiator.

On May 23, 1873, a law was passed by Denmark, pursuant to the Scandinavian monetary convention, providing for the single gold standard, and on June 4, 1873, a similar law was passed by Sweden and Norway.

On July 9, 1873, the German Empire enacted a law creating the single, gold standard for that empire—five months after our Demonetization Act had become a law.

France had not yet taken action, and it was not until after the release of the silver of Germany by a change of standard in that country, facilitated by the payment by France to Germany of 1,000 million dollars as indemnity on account of the Franco-Prussian war, that a change took place in France. In the payment of part of that indemnity, France transferred 273 million francs in gold and 239 million francs in silver. The action of Germany induced the French authorities, in 1874, not, indeed, to adopt the gold standard, but to close the French mint to the free coinage of silver, leaving the existing silver currency a legal tender, as it had been before. The effect of this in time, was the same as if it had adopted the gold standard. And yet France, that, as Mr. Sherman says, "yielded reluctantly" to the American idea of an exclusively gold standard, advanced at the conference of 1867,

only provisionally suspended the free coinage of silver, and with no purpose of adopting the exclusive gold standard, notwithstanding the recommendations of the Paris conference of 1867.

General Francis A. Walker, at the International Monetary Conference of 1878, said:

"As the Conference of 1867, wholly absorbed in the consideration of the means of securing International Coinage, did, incontestibly, exert a powerful influence in initiating the movement for demonetizing silver, it remains for the Conference of 1878, with a more sober judgment and a larger view of human interests, instructed, as the nations have been, by the bitter experience of the past few years, to put forth its hands to stay the progress of that demonetization which has already brought such mischiefs upon trade and the production of wealth." (*Horton's Report*, p. 74).

The disasters which General Walker speaks of in this quotation have increased, since these words were uttered, a hundred fold.

The first and most vigorous practical efforts towards the single, gold standard, it is plainly apparent, from the facts above stated, originated with citizens of the United States. The first legislative action looking to that end was in the United States. It was not, however, the result of any international agreement or treaty. It sprang from the efforts of a few men, who had a theory as to an ideal monetary standard, and these persons happened to be in places of commanding influence and importance in the legislation of a great country.

At the Paris conference of 1867, Mr. Ruggles, speaking of the law which had created the United States Mint (*Appendix*, Note 2) said:

"The original act of Congress, which was passed at a time when we were less *enlightened* than to-day, either by study or experience, sought to establish a double standard, by giving to gold coin and silver coin equal legal currency in payments, whatever might be the amount of the debt."

He also said, at the same time:

"The legislators and the people of the United States have sufficiently learned, if not by study at least by experience, that the system of a double standard is not only a fallacy, but an impossibility, in assuming a fixed relation between the values of two different products, gold and silver." (*Ex. Doc., No. 14* (*supra*) p. 40).

"Mr. Sherman, however, who had been such a potent factor in bringing about a change of monetary systems in the world, seems afterwards to have become differently "enlightened," and, long after the evil had been done, to wit, on July 15, 1878, he wrote to W. S. Groesbeck, of Cincinnati, Ohio, as follows:

"During the monetary conference in Paris, when silver in our country was excluded from circulation, by being undervalued, I was strongly in favor of the Single Standard of Gold, and wrote a letter, which you will find in the proceedings of that conference, stating briefly my view. At that time the wisest among us did not anticipate the sudden fall of Silver or the rise of Gold that has occurred. This uncertainty of the relation between the two metals is one of the chief arguments in favor of a monometallic system. But other arguments, showing the dangerous effect upon industry, by dropping one of the precious metals *from the Standard of value*, outweigh, in my mind, all theoretical objections to the bimetallic system. I am thoroughly convinced, that if it were possible for the leading commercial nations to fix, by agreement, an arbitrary relation between Silver and Gold, even though the market value might vary somewhat, from time to time, it would be a measure of the greatest good to all nations." (*Report Monetary Conference, 1878*, p. 139).

The adoption of gold monometallism, which had rested on mere theory, had, by practical demonstration, been shown to be founded in error, and to have a "dangerous effect upon industry;" and we have here the chief promoter of that policy confessing the mistake.

At the time of this legislation, initiated, as it was, in the United States, there was no demand in this country for a change of metallic standard. We had for nearly ten years been using, and continued for five years more to use,

paper money, even for fractional currency. Neither gold nor silver was in general circulation. No evil in metallic standards was apparent. There was no discussion or occasion for discussion among the people. The gold standard was not evolved through either the necessities or the desires of the people of the United States. It was the work of a few doctrinaires in monetary science, whose potent chief happened to be chairman of the Finance Committee of the American Senate.

XII.

International Bimetallism at an Agreed Ratio.

We have traced the evils that have befallen the Western world, from the adoption of gold monometallism. The disastrous tendencies and results of this change of monetary policies soon became evident, and very earnest efforts have been made, from time to time, through international conferences, to relieve the difficulty.

Students of monetary history had discovered that the bimetallism of the seventeenth, eighteenth and the early years of the nineteenth century had one serious defect. This was, that owing to differences of *ratio*, as fixed by the *laws* of different countries, silver would leave some countries and go to others where it was worth more in gold; gold would leave some countries and go to others in which it was worth more in silver (*supra*, pp. 28–30).

This circumstance caused fluctuations in the relative volume of the two metals, in the different countries, and seemed to the lawmakers—each country acting for itself—to require frequent changes in the legal ratio. These changes embarrassed commerce. This was especially so prior to the French law of 1803. That law, as we have already shown (*supra*, Ch. VII), maintained a substantial equilibrium between the metals, until the demonetization

acts of 1873. It was aided also, after 1865, by the "Latin Union," which united in one monetary system France, Belgium, Switzerland and Italy.

Eminent statesmen and thinkers, of whom Henri Cernuschi was one of the leading spirits, recognizing the serious evils which had come from the experiment of 1873, urged that the only cure for these ills rested in a return to bimetallism, under some arrangement between nations commercially powerful, by which they should all have the same legal ratio of the metals, in their gold and silver coins; this would at once restore the combined volume of the world's gold and silver to its value-measuring function, and the uniformity of ratio would eliminate the old difficulty arising from exportation caused by differences in mint values.

The efforts that have been made to bring about such an international agreement are themselves evidence of the existence of those evil results which had followed the monometallic experiment,

Upon the invitation of the United States, a monetary conference was held, in Paris, in August, 1878. This invitation was extended under the requirements of the Bland Act (Feb'y 28, 1878), asking other nations "to join the United States in a conference to adopt a common ratio between gold and silver, for the purpose of establishing internationally bimetallic money and securing fixity of relative value between those metals."

The United States was represented in that conference by able and devoted bimetallists. They accomplished little. "The English delegates, while strongly deprecating the crusade against silver, nevertheless declared that England would not recede from the monetary legislation of 1816, establishing the single, gold standard." (*American Report*, p. 212.) A majority of the European delegates responded "that the selection for use of one or the other of the two metals, or of both simultaneously,

should be governed by the special position of each state or group of states;" they further responded that the differences of opinion which appeared, "exclude the discussion of the adoption of a common ratio between the two metals." (*Ib.*, p. 214). Such were the barren results of this first international conference, called to promote bimetallism.

The next conference was held in Paris, in April, 1881. It convened on the joint invitation of the United States and France.

Mr. Magnin, the French Minister of Finance, was president of the conference, and, in the course of his opening address, said: "We hope that it will be proved, as well by the data of theory as by those of experience, that international bimetallism is the only system which will be able to restore monetary regularity throughout the world."

This conference, after thirteen days' discussion, having accomplished no practical result, adjourned until April of the next year. It, in fact, never reconvened.

The Brussels conference, of November, 1892, was also initiated by the United States. It resulted also from an act of Congress, which authorized the President to appoint commissioners to an international conference, to be held "with a view to secure internationally, a fixity of relative value between gold and silver as money, by means of a common ratio between those metals, with free mintage at such ratio." (*Act of August 5, 1892.*) The memorandum of instructions to the British delegates to this conference states that the first overtures made to the British government by the United States, in this connection, included the suggestion "that a ratio might be established by the leading nations, for the coinage of silver at their several mints;" but, upon receiving the invitation in this form (as the memorandum proceeds to state) "it was intimated, in reply, that Her Majesty's government would not be

able to accept an invitation couched in such terms." So that, in this case, Great Britain definitely refused to enter into a conference for the purpose designated in our act of Congress.

Thereupon, the United States proposed a conference to consider "what measures, if any, can be taken to increase the use of silver in the currency systems of nations." This conference, thus limited in its scope, was as futile as its predecessor of 1881, and in like manner it at last adjourned to a subsequent date (May 30, 1893); but again, like its predecessor, it never reconvened.

There are many eminent statesmen and economists, in England, Germany and France, who are earnest and untiring advocates of international bimetallism. They seem however, to have little influence with the "Powers that be." Other European countries wait on England. But in Great Britain the "creditor-country" argument—to wit, that, as a creditor country, England is interested in the appreciation of the world's metallic standard—controls, and seems bound in the future to control, the national policy. This argument was used, even by so great a man as Mr. Gladstone, in 1893.

Commenting upon his speech on the subject of the gold standard, Mr. W. H. Grenfell, an eminent English bimetallist, in the Fortnightly Review of September 1, 1893, uses this language:

"The Prime Minister then wound up one of the most effective yet misleading speeches ever delivered in the House of Commons by an appeal to the old 'creditor country' argument, an appeal, in fact, to the greed of England:—England is the great creditor nation of the world; England is not going to be fool enough to encourage the making of any arrangement by which her debts shall be paid to her in a 'discredited' metal.

"This is the gist of the cry, and upon it I should like to make two remarks: That England is the great creditor country cannot be gainsaid; that England has debts owed to her in every portion of the globe cannot

be denied; but I am happy to think that there are many in England, and I should like to number the Prime Minister the first among them, to whom the honour of England is at least as sacred as her debts, and who blush to see England playing the part not merely of a Shylock, for Shylock only asked his due, but of a Shylock who uses false weights and measures, and strenuously resists all attempts to have them rectified. And again, to use a perhaps more convincing argument, is this war upon silver wise in her own interests? Are not many of these debts owed to her by silver-using countries—by America (North and South), by India, by China, and the East; and is it a wise thing, from the debt-recovering point of view, so to depreciate the assets of the debtor that payment becomes impossible?

"By how many millions sterling have the foreign securities and stocks held in this country been diminished since this great speech was delivered, and since the Brussels conference failed to meet again? By how many tens of millions will they be reduced before the remedy is applied?

"Can we be proud of the part that England has played in this vital controversy? Are we pleased with it when we consider the state to which trade, commerce and agriculture have been reduced at home? Are we pleased with it when we consider that we have just robbed 250,000,000 of our fellow-subjects in India, by a stroke of the pen, even though it may be some time before they realize that the mints hitherto open to them have been closed, and the weight of all their fixed taxes and burdens increased? Is this a condition of things which, with regard to future possibilities, we can contemplate with confidence?

Notwithstanding appeals such as this, made by eminent bimetallists, there seems, under present conditions, absolutely no hope of initiating a restoration of bimetallism through an international agreement. The United States has for twenty years been urging such change of policy upon European powers. Each new effort results in greater discouragement than those preceding it. Under such circumstances, are we to give up all effort for a change of monetary policy, so rashly and mistakenly initiated, as it was, by the United States, as we have already demonstrated? Or shall the United States now

take some radical step, without further awaiting the consent or agreement of other nations? This will be the subject of our further consideration.

XIII.

Independent Bimetallism by the United States, at the Present Coinage Ratio.

In discussing the very important subject which constitutes the principal issue of the day in political debate, as to whether the United States should alone attempt a restoration of the bimetallic policy, the question must be considered in the full light of all the facts and the argument contained in the foregoing pages.

We are told by gold monometallists that if the United States should alone attempt action of this character, gold would at once rise to a premium and be exported to European countries, and that we should be practically silver monometallic, whatever our law might declare. It is contended that, under the Gresham Law (which is expressed in the maxim that "cheap money drives out good money"), it is inevitable that our silver, being cheaper than gold, would become our sole metallic circulation, and gold would entirely disappear.

Bimetallists recognize the full force of this law, when rightly understood, and its force, as applied to the movement of gold and silver by reason of conflicting ratios, has been fully admitted in the foregoing pages (*supra*, pp. 28–30).

The subject under discussion is one upon which well-informed and intelligent men honestly differ. It is, indeed, impossible to forecast with absolute certainty the results of a great change in monetary policy. The best we can do is to reason from past experience, as applied to present world conditions.

Independent bimetallism by the United States, at the

present ratio, must result in one of two ways. It would either (1) raise the value of silver and reduce the value of gold, throughout the world, until these values met each other at the established mint ratio of the United States, in which event the absolute parity of the metals would be attained; or (2) gold would go to a premium as compared with silver, (and, in that event, as compared with all paper currency of the United States,) and gold would disappear from our money circulation. We confidently assert that in either event the result would be beneficial to the United States, and our condition would be vastly better than under the present single gold standard.

Let us consider the probability of the United States being able, alone, to maintain the parity of the metals.

We have heretofore shown the remarkable success of France in maintaining, with approximate steadiness, the parity of the metals, from 1803 to 1873, notwithstanding the most violent fluctuations of relative supply of the two metals, and in spite of conflicting ratios at the same time existing in free-coinage mints, in other parts of the world. The difficulty in past bimetallism has always arisen from a conflict of *legal* ratios in the monetary systems of different countries. It has not resulted from any commodity demand for the metal.

Under the freedom in the operation of the law of supply and demand, afforded by open mints, it is the monetary demand which fixes value (*supra*, p. 19–22).

If the United States opens its mints to free coinage of both metals, at the present ratio of 16 to 1, with full legal tender for both metals, this means that in a country of seventy millions of people, having by far the greatest aggregate commerce, internal and foreign, of any nation in the world, a mint value is fixed upon silver in relation to gold. This tremendous force must at once fix the price of silver, as measured in gold, in the United States unless there is somewhere a strong antagonistic force.

But in present world conditions there is no such force. No other country by an open mint for both metals, offers at this day an opposing market. All the former bimetallic mints are closed to silver. With closed mints the conflict of ratios ceases to be an operative force. If, indeed, the United States should now open her mints to free coinage, at the ratio of 16 to 1, and France should open hers at the ratio of 15½ to 1, then, the two countries, being each of great commercial strength, exact parity of the metals would not be maintained in either. Our silver would go to France, her gold would come to us. But with the French mints closed to silver no such result could happen. The fact that bimetallism does *not* now exist in other countries furnishes the assurance of success for independent action by us.

But it is said that by thus opening our mints at our present ratio, this country would become the dumping ground for the world's silver; that the high value we should thereby give to that metal would attract it from all other countries.

This argument is manifestly based on the assumption that silver in this country would, in relation to gold, rise in value, for it is only by an increased gold value here that silver could be attracted from elsewhere.

But it is apparent that the gold price of silver cannot rise in New York without simultaneously rising in London, Calcutta, Yokohama and the City of Mexico.

The opening of our mints to the free coinage of silver, equally with gold, does not mean that our mint will give out gold in exchange for silver, but only that the metal silver may be freely changed into legal-tender silver coins of the country, as the gold metal is now changed into gold coins.

Again, from what sources would this silver come, to be thus dumped into our mints at our ratio of value? All the silver money of all the gold-using countries of Europe cir-

culates in those countries as money at a higher gold value for silver than that fixed by our ratio; their large coins at a ratio not exceeding 15½, their subsidiary coins at a ratio less than 15. None of this silver could be drawn to our mints, coining at a ratio of 16 to 1. The silver-standard countries would have no inducement for depleting their circulation, simply because their own currency had risen in value. The demand for a larger volume at home would be thereby increased, and no gain could come from parting with that which they had.

There is one country, under present conditions, whose silver might come to us. Last year (1895) Chile changed her monetary system and adopted the gold standard, with a limited-tender silver token money. She very absurdly fixed the relation of the metals in her silver and gold coinage at the ratio of about 30 to 1 (*Cf. U. S. Mint Report*, 1895, p. 416), relying, apparently, on the then "commercial" ratio of the metals. A very slight advance in the present commodity price of silver will cause her silver coins to be melted or exported. With an open mint for silver in this country, at the ratio of 16 to 1, the silver currency of Chile would quickly disappear from circulation. If, however, the entire silver money of that country should come to our mints, its presence would not be felt. Its amount in 1895 was estimated at only nine million dollars. (Muhleman's *Monetary Systems of the World*, p. 158.) The existing silver money stock of the United States is 625 millions of dollars. (*Mint Report*, 1895, p. 41.)

Some years ago, Mr. David A. Wells wrote as follows:

"Silver is the only suitable coin medium for countries of comparatively low prices, low wages and limited exchanges, like India, China, Central and South America, which represent about three-fifths of the population of the world, or about a thousand millions of people. Civilization in most of these countries, through the advent of better means of production and exchange, is rapidly advancing, necessitating a continu-

ally increasing demand for silver as money, as well as of iron for tools and machinery. Generations, also, will pass before the people of such countries will begin to economize money, by the use, to any extent, of its representatives, paper and credit. Under such circumstances, a scarcity, rather than a superabundant supply, of silver in the world's market is the outlook for the future, inasmuch as a comparatively small per capita increase in the use of silver, by such vast numbers, would not only rapidly absorb any existing surplus, but possibly augment demand in excess of any current supply." (*Recent Economic Changes*, p. 459.)

It is a well known fact that there is now no large uncoined stock of silver bullion anywhere in the world, outside of the United States Treasury. That which is in the Treasury is, for the most part, represented by notes and certificates, now constituting a large part of our currency circulation.

We have already shown (*supra*, p. 21) that even with all the restrictions that have existed as to silver, the net silver coinage of the last 22 years equals 85 per cent of the gross silver product. A great deal of silver is, however, annually required in the arts. The director of the U. S. Mint estimated the amount so used in 1893, at a sum equivalent to more than 13 per cent of the product of that year. Most estimates are a *great deal larger*.

The discovery of valuable deposits of either gold or silver is not determined by the diligence of the searcher. Men are always seeking the precious metals. The opening of "bonanzas" of either metal, is the result of happy accident. The silver "bonanzas" thus far discovered are nearly exhausted. Some that were large producers when silver was so low as 60 cents per ounce, have now, with silver at 68½ cents per ounce, entirely ceased operation. The reason is found, not in the low price of silver, but in the fact that the ore has "played out." We have already shown that the discoveries of the precious metals during the last 23 years have added more to the gold than to the silver stock existing in the world. The monetary demand

is never satisfied. With the mints open to both metals, at an established ratio, we have, in effect, an unlimited demand pressing against a limited supply.

Past experience, applied to present conditions, legislative, commercial and natural, justifies the belief that the United States, by the adoption of independent bimetallism and the consistent application of the policy in practice, can maintain the parity of the metals, at our present legal ratio.

Some gold monometallists in this country, however, assert that free coinage of silver involves a great inflation of the currency, and they compare this policy to the issue of fiat paper money, and urge that the inflation of a cheap money will drive out our gold.

Nothing can be further from the truth. The principle of free coinage is the very opposite of "fiatism." The present difference between the "intrinsic" and the nominal value of our silver dollar is the result of what may be called "fiat." It comes from the arbitrary action of law, in giving to the mere token a certain value in exchange in excess of the value of the material composing it. Under free coinage the fiat element would disappear. We should no longer have a "53-cent silver dollar." The intrinsic value of the silver dollar would be the same as its nominal value—100 cents. The ten-dollar gold piece is now intrinsically worth ten dollars, because the law says that anyone presenting 232.2 grains of pure gold at the mint can have it changed into ten dollars of full, legal-tender money. When the law shall say that anyone presenting 371¼ grains of pure silver at the mint can have it changed into a silver dollar of full, legal-tender money, the intrinsic worth of that dollar will, for the like reasons, be 100 cents. The only question for debate is, whether the silver dollar and the gold dollar will both continue in concurrent circulation, which is the subject we are discussing.

The quantity of fiat paper money depends solely upon the will of the power issuing it; the quantity of silver money, under a free-coinage system, depends upon the quantity of silver that men can or will bring to the mint, for conversion into coin. This will be regulated by the fundamental economic law of "supply and demand." (*Supra*, p. 19–22.) Any growth in the volume of silver currency must be very slow. It is bound, in any event, by the natural limit of silver production; if that should be great, then also by the capacity of the mints. Even under the present tremendous demand for gold, and with the unusual supply of that metal, the annual increment of the gold stock is slight. We have already shown, however, that the silver stock has for the last 22 years been increasing with less rapidity than the gold stock. (*Supra*, p. 16.) Manifestly, the annual increment of silver money, under a free-coinage system, must be small.

The effect of independent bimetallism will be, not to materially increase the volume of silver money, but to change the character of that which now is. It gives the value-measuring quality to the existing silver money. It broadens the base and lessens the height of our monetary structure. The necessary effect of such a policy is to distribute between silver and gold the function which now rests on gold alone. This must necessarily raise the value of silver, as measured in gold. It will lower the value of gold, as measured in silver.

Other gold monometallists, with strange contrariety of argument, tell us that the proposed policy will cause a great contraction of our currency, by driving therefrom all our gold, into other countries.

But what will take the place of the gold so driven out? It cannot go without an equivalent returned. So far as the question is affected by coinage legislation and the principles of the Gresham Law, gold will not go from us unless it is worth more silver somewhere else than it is

here, and in that event silver fills any vacuum caused by its departure. This is not a contraction in the currency; it is a change in its character. This change of character cannot happen if what we have said about ratios and the demand for silver under present conditions is well founded.

Again, it is said that the adoption of free coinage will cause gold to be hoarded.

This may happen through a panic caused by men's ignorance or fears, but such a panic is short-lived. Gold will be hoarded only so long as men think there is profit in holding it. A revival in industry and an advance in values will bring it out of its hiding places.

But under the policy of gold monometallism in Europe and America, the hoarding of gold has been for a number of years in progress on a scale unknown in former history. Why is it hoarded? Because, with a universal and persistent fall in values of all other things, gold is more profitable idle than invested. The result is that gold has for several years been piling up in the great money reservoirs of Europe. (*Appendix*, Note 16.) What is this but hoarding?

In June, 1896, nine banks of Europe held more than 1,550 millions of dollars in gold—much more than one-third of the estimated stock of gold money in the entire world. Excluding the bank of Italy with its 60 million dollars in gold (as to which the writer has not the present means of comparison) the other eight banks referred to, between June, 1893, and June, 1896, increased their holdings of gold 410,000,000 of dollars—an increase of 40 per cent in three years.

It is not a sufficient answer to say that this great increase of gold in these banks covered new issues of notes, which were added to the currency circulating among the people. Take, for example, the bank of England. On June 24, 1896, its Issue Department contained 46,786,675 pounds

sterling, in gold, for which it had issued its notes to the Banking Department; but the latter department still retained in the bank 36,552,155 pounds sterling in these notes. They were not circulating among the people.

Now look at the Bank Reserve. In the United States we consider a cash reserve of 25 per cent of liabilities amply sufficient. Our law formerly required of national banks, in certain principal cities, 25 per cent, and in other places 15 per cent of the aggregate of note circulation and deposits (*Revised Statutes*, sec. 5191). By a later act this was reduced to 25 per cent and 15 per cent respectively of deposits only (*Supp. Rev. Stat.*, p. 27).

In 1873 the cash reserve in the Bank of England and London joint stock banks, together, was 11.2 per cent of liabilities (Bagehot's *Lombard Street*, p. 337). At the same time, that of the Bank of France was 25 per cent. Conservative English authorities, however, have thought that the reserve of the Bank of England should be about one-third (*Ib.*, 172).

For the last thirty months, the cash reserve in the Bank of England has averaged more than 60 per cent of its liabilities. During that period it reached a maximum of 71 per cent. This plethora of cash in the bank has not been brought about by bank effort. There has been no restraint upon its easy exit. The bank rate of discount (*supra*, p. 31) has since March 1, 1894, (to July, 1896,) stood uniformly at 2 per cent.

These facts show a great increase of idle money in the Bank of England. It is a method of hoarding. It is a very natural result, indeed, of falling values and depression of industry. Gold grows in value by lying idle. Advancing commodity values and industrial activity will call it out into circulation. Under present policies, American as well as European gold seeks these great reservoirs. A change of monetary policy will diminish, rather than increase, this tendency.

Under present monetary conditions in the world, there is good reason to believe that the United States can now successfully maintain the parity of the metals, under a bimetallic policy, without the aid of any other nation. If the United States should succeed in so doing, by means of its own unaided action, this would of course have all the effect of international bimetallism; for the result can only be accomplished through the general lowering of the relative value of the world's stock of gold, and the general rise in relative value of the world's stock of silver, until these values meet each other at our coinage ratio, and so remain. International bimetallism could do no more than this.

But let us assume, for the sake of argument, that the United States cannot, independently, maintain the parity of the metals, under a bimetallic policy, and that gold would go to a premium and, by reason of that premium, be exported to other countries. What would be the effect of that situation upon the general welfare of the American people? This is the particular concern of the American legislator.

It is claimed that by the adoption of free coinage we should become practically silver monometallic.

Let us state the case in the strongest way, and assume that we by law, change from the single, gold standard, to the single, silver standard, how would that effect the relative values of silver and gold? The demand for gold, manifestly, would be greatly lessened, in proportion to its supply; that for silver would be greatly increased, in proportion to the supply of that metal. This must lower the value of gold and raise the value of silver. It is, of course, impossible to measure the probable effect of this enormous transfer of demand from one metal to the other. It is very clear that if Europe and the United States had demonetized gold, instead of silver, as was advocated by eminent monetary writers, some thirty-five

years ago (See *Chevalier on Gold*) then gold would now be the "cheap" money, silver would be the "best" money. Who can tell but that the transfer of the United States alone from the gold to the silver column would bring the "commercial" ratio close to our coinage ratio? Certainly the 53-cent silver dollar would disappear. It might become a 90-cent or even a $1.05 silver dollar.

While the effect of this transfer of demand cannot be measured, its character can be illustrated. The stocks of gold and silver money respectively in the world are about equal, as measured in our dollars. (*Mint Report*, 1895, p. 40.) The gold stock, in gold-standard countries, is about 3,480 millions; that of silver, in silver-standard countries, is above 2,044 millions; or 100 of gold to 57 of silver. If these figures represent the relative demand on the two metals, for standard money purposes, under the present distribution of monetary systems, they would explain the existence of at least a "57-cent" silver dollar. If, however, the United States, with its 618 millions of gold goes out of the gold-standard column, and with its 625 millions of silver already on hand, enters the silver-standard column, the relation is greatly changed. The relative demands on the metals for standard money purposes, would be as 100 for gold to 93 for silver. This would suggest a "93-cent" silver dollar. The gold-using countries must, however, always make drafts on the silver supply for their subsidiary coinage. No corresponding demand or necessity for gold exists in silver-standard countries.

While, as stated, the figures here used are not intended as a computation of actual results, they nevertheless illustrate an undeniable effect of such a shifting of demand, as between the two metals. The difference between our gold dollar and our silver dollar, in intrinsic value, would diminish. The value of the metal in the

silver dollar would approximate that of the metal in the gold dollar.

But it is only necessary to assume what is contended by gold monometallists—that, under the proposed policy, gold would go to a premium, as measured in all our other currency. What effect will this have on our commerce and industries? We should certainly have, as against those countries remaining on the gold-standard, advantages now possessed, as against us, by present silver-using countries (*supra*, p. 42-47).

Let us adapt an illustration already used: The United States and England being alike on a gold basis, let a bale of goods be sent from the United States to be sold in England, on which, if $10,000 (including transportation and commission) be realized, it is a profitable affair. To obtain this amount, the goods must be sold in London at 2,000 pounds sterling (converting the pound at $5). The United States having changed its monetary policy, let us assume that gold rises to a premium of ten per cent as compared with the silver and paper currency of the United States. Again our merchant ships a bale of goods to London, on which, as before, if he obtains $10,000 he realizes a profit. He can now sell these goods on the London market for 1,818 pounds, and make the same profit as before.

On the other hand, both countries being on a gold basis, let the English merchant send a bale of goods to the United States, on which he must realize 2,000 pounds sterling. He obtains it by selling at $10,000 in this country. Upon gold going to a premium of ten per cent in the United States, he must, however, in order to make the same profit, sell the same goods here at $11,000 (*supra*. p. 44). The prices of English merchandise must be increased 10 per cent in America, in order that the seller may realize the same profit as before; but the prices of American products selling in England may be lowered

nearly 10 per cent, and the seller derives the same profit as formerly. So far as the matter is affected by the premium on gold, we can undersell the Englishman in both markets, and we obtain the like advantage in every other market in which we compete with him.

The illustration as here stated is on the assumption that our home prices have remained stationary, also that the English home prices have remained unchanged. There would doubtless be a tendency to equalize relative positions, but this can only be by a rise of American home prices, and a fall in English home prices. This, however, means that we should have the advantage of rising values with the attendant growth of productive activity and increase in the demand for labor, while, at the same time, and from exactly the same causes, the Englishman would have the burden of falling values with attendant depression of industries and diminution of employment.

The tendency would be to increase our export trade, and the same cause will operate to diminish the export trade of gold-standard countries. (*Supra*, p. 46, 47.) Certainly, so far as our producing industries and the welfare of our labor population are concerned, we should derive a great advantage from the existence of this premium on gold, while our competitors in the world's trade would be injured thereby. A result such as this upon the commercial relations of the world, would be the most persuasive argument to bring about an international agreement for bimetallism, so as to prevent the continuance of such advantages in favor of this country.

The considerations here presented furnish some of the reasons which caused the great international bimetallist, Henri Cernuschi, in the last years of his life, to change his views as to what was to the interest of America; for while advocating most earnestly international bimetallism, he formerly deprecated any effort on the part of the United States to undertake bimetallism alone. In April,

1896, however (being less than one month before his death), he expressed a complete change of view concerning our interests, and after reciting the advantages we should have, as above mentioned, together with other considerations, he said:

"This is why, inasmuch as England's attitude prevents the realization of international bimetallism and condemns one-half of the world to gold monometallism and the other half to silver monometallism, I would not hesitate, were I a citizen of the United States—I, Cernuschi, the father of international bimetallism, as I am everywhere called—to become a silver monometallist."

He further said, at the same time:

"Under the regime of the new standard, the productive power of the United States would receive so enormous an impulse, and this development would have such a disastrous effect upon the economic and financial interests of England and other European nations now governed by the gold standard, that it may be confidently predicted in advance that the course of events would force the adoption of international bimetallism, as the only true solution, even upon those who to-day deny the possibility and efficacy of it." (Edmond Thery, in the "*Economiste Europeen,*" May 23rd, 1896.)

Mr. W. H. Grenfell, an eminent English bimetallist, has recently said:

"I believe that the free and unlimited coinage of silver at a ratio of 16 to 1 in the United States would greatly increase the chance of an international agreement for the adoption of bimetallism. * * *

"I believe there would be such a stimulus to trade and such an increase in exports of the United States, that gold would begin to flow back, in a natural manner. I believe that the way for the United States to keep their gold is to go on to silver."

In the same connection he says:

"If bimetallism were once started in the United States, I believe that it would give an enormous impetus to bimetallic agitation throughout Europe to get different countries to join in a bimetallic agreement with the United States, and I believe that the agitation would be so strong, that it would be impossible for the gold ring to fight against it. Most

countries are ready for a return to the bimetallic system. What is wanted is the electric spark, the turn of the wheel, the something which will set the machine in motion." (*New York World*, July 7, 1896.)

Experience, reason and authority all concur in sustaining our contention, that, notwithstanding a premium on gold, the change of policy would be advantageous to us, and is the surest means of ultimately effecting an international agreement for bimetallism, at a common ratio.

It is, however, urged by many, that we owe immense sums abroad, which are payable, principal and interest, in "gold coin of the present standard of weight and fineness;" and that, when gold is at a premium, it will be more difficult to pay these debts. The fact stated is true; the conclusion derived is false. How do we now pay the principal and interest of these gold debts, due abroad? We pay it from the fruits of our soil, the product of our labor, the output of our manufactures, the earnings of our railroads and other large enterprises. Any policy which has a tendency to diminish the value of gold and to increase the value of all these other things, must make it easier to pay such debts, notwithstanding an apparent difference between the gold dollar and dollars of other currency. The necessary effect of the proposed policy, whether successful or unsuccessful in maintaining the parity of the metals, is to lower, all the world over, the value of gold as measured in commodities, and to advance, all the world over, the values of commodities and other things, measured in gold. Therefore, less of commodities, less of labor, will pay a given gold debt, than if present conditions should continue.

But again, it is said that many of our bonds and securities are held abroad, and that these in great numbers will be sent back to us and gold demanded in payment.

These securities can only be resold to us for such price as we are willing to pay. The return movement can hardly exceed in rapidity what it has been during the last

three years. On merchandise the balance of trade has been largely in our favor, yet our gold in great quantities has been exported, and the greater portion of this exportation must be in payment for securities which we doubtless buy at a less price than that for which they were sold.

The insolvency of railroad and other corporations, their inability to pay interest upon securities they have issued, the cessation of dividends from American enterprises, all resulting from a fall of values caused by a contraction of the metallic standard of value, is a sufficient explanation of the re-selling to this country of securities which, in the hope of gain, had formerly been bought by foreign investors. Any policy which stimulates productive activity and advances values in this country will have exactly the reverse tendency. As railroad and other enterprises increase their earnings, pay their interest promptly, and begin to pay dividends; instead of a return of securities to this country, there will be a foreign demand for those securities. The English or other European investor does not stop to consider whether gold is at a premium or otherwise, in the country in which he invests, but looks only to the certainty of continuous income and final return of principal. This certainty comes from prosperous times. It is associated with advancing values in the place where the investment is made. It is never associated with hard times and falling values.

Looking at the subject from whatever point we will, we must conclude that the interests of the American people, to whatever class they belong, whether capitalist, employer, producer or laborer, will be advanced by the proposed change of monetary policy; while a continuance of the present gold monometallism will necessarily plunge us into still deeper abysses of disaster.

XIV.

"REPUDIATION."

Those who desire a restoration of bimetallism are accused of dishonesty. It is said that they desire to scale down debts one-half and to compel all creditors to accept fifty cents on the dollar, in full satisfaction of their obligations. This assertion has been made very frequently of late, by gold advocates in the United States.

If they, who thus contend, mean that under the proposed policy fifty cent's worth of silver, as then valued, will pay one dollar of debt, as then existing, the contention is manifestly absurd. The reader of the foregoing pages knows, not only that bimetallists expect, but that the fact must be, that gold would fall and silver rise in value, and that there would no longer be a "fifty-cent dollar." He also knows that it will take a dollar in silver or paper currency, then, as now, to pay one dollar of debt due at home; that to discharge a gold debt, payable abroad, it will require an equivalent amount of our currency, plus any premium there may then be on gold.

If, however, it is meant that all other things would rise in value, as compared with gold, and that to pay a debt of $5,000 will require less of product of soil or of factory, less of labor or effort, than at present, we may at once admit it. The proposed policy would arrest, and for a time reverse, the present general downward movement of all values, the increasing pressure of all debts. With gold as the sole measure of values, this movement must continue downward, this pressure continue to increase. With the volume of both metals as the basis of values, we shall have the nearest possible approach to equality of value at the time of the debt-incurring and the time of the debt-paying, that the wisdom of man can devise. (*Supra*, page 39.)

The effect of the proposed policy on the relation of debtor and creditor is not the most important factor in the problem. (*Supra*, p. 41 .) It is, however, one to demand most serious consideration. If it has been found that the existing monetary policy is continously and persistently increasing the burden of the debtor and giving an unearned advantage to the creditor, what reason, in morals or in law, stands in the way of correcting it? Does not justice require that a corrective should be applied? And if the policy proposed will, in its ultimate course, give the greatest degree of equality in the relations of debtor and creditor, shall the remedy be rejected because it may produce some temporary paroxysm, necessitated by the very violence of the disease?

If, as shown by later events, a great wrong was in fact done in 1873, from which millions of our people are now suffering, shall we hesitate to correct it, because of some temporary loss to that class best able to bear it? Let us gather wisdom from a distinguished opponent of independent bimetallism. In 1868, Senator Sherman used these words:

"The depreciation of the burden of debt is a loss to a class generally benefited by the increased value of fixed property, and better able to bear the diminution of their capital; but an increase of the burden of the debt, to the debtor class, by the payment of coin instead of depreciated paper money, often produces absolute ruin, without fault of the debtor." (*Rep. Com. No. 117*, *Senate*, 40th Congress, second session).

These words well expressed an important fact, but Senator Sherman, while recognizing in its full force the relation of debtor and creditor to the burden of debt, as here set forth, nevertheless argued at that time for an exclusive gold standard, notwithstanding any existing contracts, in this language:

"All Private contracts are made in view of the power of Congress to regulate the value of coins. This power has been repeatedly exercised by Congress, and in no case was any provision made for enforcing exist-

ing contracts in the old, rather than in the new standard. All property and contracts may be affected by legislation, but it is not presumed that in the exercise of its legislative power Congress will be controlled by either the debtor or the creditor, but only by the *general good.* (*Ib.*)

Both statements, thus made, are sound. The "greatest good of the greatest number," is the end to be sought by the legislator, and if the application of that principle, requires a change in our monetary policy, then the disadvantage to the few should not override the much greater advantage of the many.

Nor is there justification for the charge of any breach of public faith if the United States should, upon the adoption of bimetallism, exercise the option, according to its own convenience, of paying its obligations in either silver or gold.

Speaking of a similar subject, in 1868, Senator Sherman says:

"The public debt is so large that a change of 3½ per cent in the value of our coin, is a reduction in the public debt of ninety million dollars. So much of this debt as exists in the form of legal tender notes will be received and disbursed as money, and as its value for some time will be less than the new coin, no provision need be made for it, but for so much of the debt as is payable, principal and interest, in coin of a *specific weight and value*, provision ought to be made for its exact discharge in that coin, or its equivalent in the new." (*Ib.*)

This statement was made in view of the proposed reduction in the size and weight of the standard gold coin of the United States, and it was at a time when silver was at premium. It will be observed that Mr. Sherman alludes to the very terms of the contract, which, if it provides for "coin of a specific weight and value," should receive "exact discharge" accordingly.

The obligations of the United States have always been payable in coin, without distinction as to whether that coin be gold or silver.

If, as we have argued, independent bimetallism shall

bring these metals to a parity, then it will be indifferent to the creditor whether he receives pay in gold or silver. But in the event of a difference in intrinsic value he cannot claim, either in morals or law, that he is entitled to receive the more valuable metal, when dollars of both kinds are legal tender. Both were legal tender at the time of his entering into the contract—at the time the bonds were issued. On frequent occasions when the matter has been brought before the Congress of the United States, that body has refused to declare them payable in gold. So long ago as 1878, by a vote of 43 to 22 in the Senate, and 189 to 79 in the House of Representatives, the Matthews resolution was adopted. This resolution expressly recited that the various acts under which the bonds were issued had made them payable in coin; recited the fact that at the time of these acts of Congress, the standard silver dollar was a legal tender of payment, according to its nominal value, for any sum whatever; and then formally resolved, that the bonds issued under these acts of Congress "are payable, principal and interest, at the option of the government of the United States, in silver dollars of the coinage of the United States, containing 412½ grains each of standard silver, and that to restore to its coinage such silver coins as a legal tender in payment of said bonds, principal and interest, is not in violation of the public faith, nor in derogation of the rights of the creditor." (Laughlin's *History of Bimetallism*, pp. 201-2.)

Some months before the passage of this resolution the Attorney General of the United States had given a similar construction to the law in answering an inquiry from Hon. John Sherman, then Secretary of the Treasury. (*Appendix*, Note 17.)

No different interpretation has ever been put upon the laws providing for the issue of these bonds, by any legislative action, and, so late as the last Congress of the

United States, an attempt was made to authorize the issue of bonds payable in gold alone, but the substitute therefor, passed by a large majority in the House of Representatives, changed the word "gold" into "coin." So that the public creditors of the United States have, in all these years, known from explicit declarations of Congress and from its refusal to declare the contrary that this government reserved the right, if it should so desire, to pay its obligations, both principal and interest, in either gold or silver coin, then legal tender of the United States.

XV.

Political and Legislative Declarations.

The necessity of a restoration of bimetallism has been constantly recognized by both the great political parties of the United States, and by Congress.

In 1888, at its national convention, the Republican party said:

> "The Republican party is in favor of the use of both gold and silver as money, and condemns the policy of the Democratic administration in its efforts to demonetize silver."

In 1892 the Republican party declared:

> "The American people, from tradition and interest, favor bimetallism, and the Republican party demands the use of both gold and silver as *standard money*, with such restrictions and under such provisions, to be determined by legislation, as will secure the maintenance of the parity of values of the two *metals*, so that the purchasing and debt-paying power of the dollar, whether of silver, gold or paper, shall be at all times equal."

The Democratic party in 1892 declared:

> "We hold to the use of both gold and silver as the *standard money* of the country, and to the coinage of both gold and silver, without discriminating against either metal, or charge for mintage; but the dollar unit of coinage of both metals must be of equal intrinsic and exchangeable value, *or* be adjusted through international agreement, or by such safeguards of legislation as shall insure the maintenance of the parity of

the two *metals* and the equal power of every dollar, at all times, in the markets and in the payment of debts."

The Congress of the United States, on July 14th, 1890, declared it to be "the established policy of the United States to maintain the two *metals* on a parity with each other, upon the present legal ratio, or such ratio as may be established by law."

On November 1st, 1893, Congress enacted as follows:

"It is hereby declared to be the policy of the United States to continue the use of *both gold and silver* as *standard money*, and to coin both gold and silver into money of *equal intrinsic and exchangable value*."

These explicit declarations of both the great parties, and of Congress, plainly show this: That, in the opinion of our people, the experiment of gold monometallism was a mistake; that a restoration of a bimetallic policy is essential to our welfare. The reasons which compelled this opinion have undoubtedly greatly increased in force, in the past four years. The necessity of action has become acute. International agreement as a preliminary step is hopeless. In view of the facts and suggestions set forth in the foregoing pages, is it not a reasonable demand that the United States should now adopt a bimetallic policy, without waiting for the consent or agreement of other nations? As we have already shown (*supra*, Chap. XI), this country, without international agreement, initiated gold monometallism. Should she not now initiate the return to a better policy?

XVI.

Concluding Remarks.

Very many matters might be stated upon the subject we have discussed, which will not be found in the foregoing pages. It has been the attempt of the writer to bring forward the more salient points and some of the more important facts in support of the contention made by advocates of American bimetallism.

Among the subjects, however, not discussed, except by occasional allusion, is the contention of some gold monometallists, that the relief from present hardships should come, not from a change in metallic standard money, but from a maintenance of the single gold standard, with an increase of currency consisting of bank paper.

Paper currency, especially when based on coin, has been most useful, and is now a necessity. Nearly three-fourths of the present circulation of the United States consists of paper money (*supra*, p. 12). The "Bland Act," and the "Sherman Act," by infusing into our currency millions of dollars in paper, based on silver purchased and deposited in the Treasury, undoubtedly retarded; and, for a while, reversed, in this country, the universal downward tendency of all values. These purchasing acts were poor substitutes for "free coinage." They were the result of compromises between the opposing forces of the double standard and the exclusive gold standard. Their effect, while they lasted, was, however, beneficial.

The repeal of the purchasing act, preceded as it was by administrative action, which, in effect, made gold alone the basis of paper issued (*supra* p. 46), with no provision for continued growth of our circulation, subjected us at once to the full effect of the general depression in values existing in gold-using countries.

Our per capita circulation of all kinds of paper and specie money, between 1880 and 1894 (14 years) increased $4.92, but between July 1st, 1894, and July 1st, 1896 (2 years) it fell $3.18.

To enter fully into the subject of paper currency would too greatly extend the scope of this discussion. It is sufficient to say, that, while an increase of bank note issues, based on coin, at some times and under some circumstances, by increasing the facilities for exchange, may stimulate industrial activity, yet experience shows that the measurement of values, in the long run, must rest upon

the volume of the precious metals used in the world at large as standard money. (*Supra,* Chap. VI.) However large the superstructure of representative money may be, a long-continued expansion or contraction of the volume of standard metallic money, on which the credit superstructure rests, will determine the rise or fall of prices, with all the consequent effect on human welfare.

The "Carlisle Bill," introduced in the last Congress, and the "Baltimore Plan," suggested by bankers of the United States, were both of them vicious, even from the gold-standard view, as providing for a bank currency largely based upon something else than gold or silver coin. The leading European economical publication, devoted to the exclusive gold-standard, speaking of the former, used these words:

"The currency [of the United States] is unstable, because too large a superstructure has been raised on a gold foundation which is not only too small, but which cannot be prevented from rapidly wasting away. And, in the opinion of President Cleveland, the remedy for this is to be found in building up still higher the top-heavy fabric, without strengthening or supporting the foundation."

American bimetallists are in favor of hard money. They believe in gold and silver coin as the legal-tender money of the United States, and as the basis of paper currency issues. They see no relief through a plan of banking providing for the issue of paper currency based on stockholders' liability and bank assets such as buildings, furniture and fixtures, and bills receivable. Neither do they favor a paper money issued by government on the security of "imperishable farm products," such as wheat, cotton and tobacco. They favor only a "sound money"—an "honest money"—that which has been recognized as such from the beginning of commerce, and which has a world-wide use, and is, therefore, a world money—a standard money composed of the two precious metals, gold and silver.

Appendix.

NOTE 1.

"An Act for Encouraging of Coinage."

(18 Charles II, C, 5—1666).

Extract:

"(3) And be it enacted by the King's most excellent majesty, by and with the advice and consent of the lords spiritual and temporal, and commons, in this present parliament assembled, and by the authority of the same, that whatsoever person or persons, native or foreigner, alien or stranger, shall from and after the twentieth day of December, one thousand six hundred sixty and six, bring any foreign coin, plate or bullion of gold or silver, in mass, molten or allayed, or any sort of manufacture of gold or silver, into his Majesty's mint or mints within the kingdom of England, to be there melted down and coined into the current coins of this kingdom, shall have the same there assayed, melted down and coined with all convenient speed, without any defalcation, diminution or charge for the assaying, coinage or waste in coinage: (4) so as that for every pound troy of crown or standard gold that shall be brought in and delivered by him or them to be assayed, melted down and coined, as aforesaid, there shall be delivered out to him or them respectively, a pound troy of the current coins of this kingdom, of crown or standard gold: (5) and for every pound troy of sterling or standard silver that shall be brought in and delivered by him or them to be assayed, melted down and coined, as aforesaid, there shall be delivered out to him or them respectively, a pound troy of the current coins of this kingdom, of sterling or standard silver, and so proportionably for a greater or lesser weight:" (8 *Statutes at Large* (Pickering), 229).

NOTE 2.

"An Act Establishing a Mint and Regulating the Coins of the United States," Approved April 2, 1792.

Extract:

"Section 11. And be it further enacted, that the proportional value of gold to silver in all coins which shall by law be current as money within

the United States, shall be as fifteen to one, according to quantity in weight of pure gold or pure silver; that is to say, every fifteen pounds weight of pure silver shall be of equal value in all payments, with one pound weight of pure gold, and so in proportion as to any greater or less quantities of the respective metals."

"Sec. 14. And be it further enacted, that it shall be lawful for any person or persons to bring to the said mint gold and silver bullion, in order to their being coined; and that the bullion so brought shall be there assayed and coined as speedily as may be after the receipt thereof, and that free of expense to the person or persons by whom the same shall have been brought. And as soon as the said bullion shall have been coined, the person or persons by whom the same shall have been delivered, shall upon demand receive in lieu thereof coins of the same species of bullion which shall have been so delivered, weight for weight, of the pure gold or pure silver therein contained. * * * ." (1 *U. S. Stat.*, 249.)

NOTE 3.

(U. S. Rivised Statutes, Section 3519.)

"Any owner of gold bullion may deposit the same at any mint, to be formed into coin or bars for his benefit. It shall be lawful, however, to refuse any deposit of less value than one hundred dollars, or any bullion so base as to be unsuitable for the operations of the mint. In cases where gold and silver are combined, if either metal be in such small proportion that it cannot be separated advantageously, no allowance shall be made to the depositor for its value."

NOTE 4.

Gratuitous Coinage.

A. Act of January 14, 1875.

"Be it enacted, etc.:

"Sec. 2. That so much of Section 3524 of the Revised Statutes of the United States, as provides for a charge of one-fifth of one per centum for converting standard gold bullion into coin, is hereby repealed, and hereafter no charge shall be made for that service." (18 *Stat.*, 296.)

B. Act of September 26, 1890.

"Be it enacted, etc.:

"That from and after the passage of this act, the coinage of the three-dollar gold piece, the one-dollar gold piece and the three-cent nickel

piece, be, and the same is hereby, prohibited, and the pieces named shall not be struck or issued by the mint of the United States." (26 *Stat.*, 485.)

NOTE 5.

Production of Gold and Silver in the World for the Calendar Years 1873–1894.

Mint Report, 1895, Page 50.

Year.	Gold.		Silver.	
	Ounces, fine.	Value.	Ounces, fine.	Coining Value.
1873........	4,653,675	$ 96,200,000	63,267,187	$ 81,800,000
1874........	4,390,031	90,750,000	55,300,781	71,500,000
1875........	4,716,563	97,500,000	62,261,719	80,500,000
1876........	5,016,488	103,700,000	57,753,125	87,600,000
1877........	5,512,196	113,947,200	62,679,916	81,040,700
1878........	5,761,114	119,092,800	73,385,451	94,882,200
1879........	5,262,174	108,778,800	74,383,495	96,172,600
1880........	5,148,880	106,436,800	74,795,273	96,705,000
1881........	4,983,742	103,023,100	79,020,872	102,168,400
1882........	4,934,086	101,996,600	86,472,091	111,802,300
1883........	4,614,588	95,392,000	89,175,023	115,297,000
1884........	4,921,169	101,729,600	81,567,801	105,461,400
1885........	5,245,572	108,435,600	91,609,959	118,445,200
1886........	5,135,679	106,163,900	93,297,290	120,626,800
1887........	5,116,861	105,774,900	96,123,586	124,281,000
1888........	5,330,775	110,196,900	108,827,606	140,706,400
1889........	5,973,790	123,489,200	120,213,611	155,427,700
1890........	5,749,306	118,848,700	126,095,062	163,032,000
1891........	6,320,194	130,650,000	137,170,919	177,352,300
1892........	7,102,180	146,815,100	153,151,762	198,014,400
1893........	7,608,787	157,287,600	166,092,047	214,745,300
1894........	8,737,788	180,626,100	167,752,561	216,892,200
Total..	122,235,638	$2,526,834,900	2,130,397,137	$2,754,452,900

NOTE 6.

Increase of World's Gold and Silver Supply, After 1872.

(Cf. Mint Report, 1895, pp. 248–50.)

	Oz. Gold.	Oz. Silver.
Total product, 1493–1894	415,080,077	7,836,325,160
" " 1873–1894	122,235,638	2,130,397,137
" " 1493–1872	292,844,439	5,705,928,023
Ratio of increase (1873–1894) to previous product (1493–1872)	41.7 per cent.	37.3 per cent.

NOTE 7.

RELATIVE PRODUCTION OF GOLD AND SILVER, BY WEIGHT, IN DIFFERENT PERIODS.

(Mulhall's Dictionary of Statistics, p. 808.)

PERIOD.	Tons of Silver to 1 of Gold.	PERIOD.	Tons of Silver to 1 of Gold.
1600–20	27.7	1871–80	18.6
1700–20	34.3	1881–82	18.4
1800–20	32.2	1883–84	18.5
1821–40	33.1	1885–86	18.6
1841–60	31.	1887–88	18.6
1861–70	22.6		

NOTE 8.

COMPARISON OF WORLD'S TOTAL COINAGE (AFTER DEDUCTING RECOINAGES) WITH WORLD'S TOTAL PRODUCT.

1873–1894.

(For recoinages 1873–1892, see "*Coinage Laws and Appendix*, 1894" p. 102. For other amounts, see *Mint Report*, 1895, pp. 50–1–2.)

Total coinage, gold	$3,404,703,469
" recoinage "	707,194,200
Net gold coinage (1873–1894)	$2,697,509,269
Total gold product (1873–1894)	2,526,834,900
Excess of coinage	$ 170,674,369

Ratio of coinage to product, 102.8 per cent.

Total coinage, silver	$2,707,815,113
" recoinage, "	367,696,957
Net silver coinage (1873–1894)	$2,340,118,156
Total silver product (1873–1894)	2,754,452,900

(All amounts estimated at coinage value.)

Ratio of coinage to product, 85 per cent.

NOTE 9.

GOLD.

Period.	Total for Period.		
	Fine Ounces.		Value.
1493–1520	5,221,160		$ 107,931,000
1521–1544	5,224.656		114,205,000
1545–1560	4,377,544		90,492,000
1561–1580	4,398,120		90,917,000
1581–1600	4,745,340		98,095,000
1601–1620	5,478,360		113,248.000
1621–1640	5,336,900		110,324,000
1641–1660	5,639,110		116,571,000
1661–1680	5,954,180		123,084,000
1681–1700	6,921,895		143,088,000
1701–1720	8,243,260		170,403,000
1721–1740	12,268,440		253,611,000
1741–1760	15,824,230		327,116,000
1761–1780	13,313,315		275,211,000
1781–1800	11,438,970		236,464,000
1801–1810	5,715,627	61,065,067	118,152,000
1811–1820	3,679,568		76,063,000
1821–1830	4,570,444		94,479,000
1831–1840	6,522,913	11,093,357	134,841,000
1841–1850	17,605,018		363,928,000
1851–1855	32,051,621		662,566,000
1856–1860	32,431,312	125,581,276	670,415,000
1861–1865	29,747,913		614,944,000
1866–1870	31,350,430		648.071,000
1871–1875	27,955,068		577,883,000
1876–1880	27,715,550		572,931,000
1881–1885	23,973,773		495,582,000
1886	5,135.679		106,163,900
1887	5,116,861		105,774,900
1888	5,330,775	136,719,751	110,196.900
1889	5,973,790		123,489,200
1890	5,749,306		118,848,700
1891	6,320,194		130,650,000
1892	7,102.180		146,815,100
1893	7,608,787		157,287,600
1894	8,737,788		180,626,100
Total	415,080,077		$8,580,467,400

NOTE 9—Continued.

SILVER.

Period.	Total for Period. Fine Ounces.		Coining Value.
1493–1520	42,309,400		$ 54,703,000
1521–1544	69,598,320		89,986,000
1545–1560	160,287,040		207,240,000
1561–1580	192,578,500		248,990,000
1581–1600	269,352,700		348,254,000
1601–1620	271,924,700		351,579,000
1621–1640	253,084,800		327,221,000
1641–1660	235,530,900		304,525,000
1661–1680	216,691,000		280,166,000
1681–1700	219,841,700		284,240,000
1701–1720	228,650,800		295,629,000
1721–1740	277,261,600		358,480,000
1741–1760	342,812,235		443,232,000
1761–1780	419,711,820		542,658,000
1781–1800	565,235,580		730,810,000
1801–1810	287,469,225	2,128,915,130	371,677,000
1811–1820	173,857,555		224,786,000
1821–1830	148,070,040		191,444,000
1831–1840	191,758,675	339,828,715	247,930,000
1841–1850	250,903,422		324,400,000
1851–1855	142,442,986		184,169,000
1856–1860	145,477,142	680,187,904	188,092,000
1861–1865	177,009,862		228,861,000
1866–1870	215,257,914		278,313,000
1871–1875	316,585,069		409,322,000
1876–1880	393,878,009		509,256,000
1881–1885	460,019,722		594,773,000
1886	93,297,290		120,626,800
1887	96,123,586		124,281,000
1888	108,827,606	2,339,207,244	140,706,400
1889	120,213,611		155,427,700
1890	126,095,062		163,032,000
1891	137,170,919		177,352,300
1892	153,151,762		198,014,400
1893	166,092,047		214,745,300
1894	167,752,561		216,892,200
Total	7,836,325,160		$10,131,814,100

NOTE 10.

Commercial Ratio of Silver to Gold Each Year from 1687 to 1864 Based Upon the Price of Silver in the London Market.

Reprinted from "The Bimetallist." See also United States Mint Report, 1895, Page 239.

Year.	Ratio.	Year.	Ratio.	Year.	Ratio.	Year.	Ratio.
1687	14.94	1740	14.94	1793	15.00	1846	15.90
1688	14.94	1741	14.92	1794	15.37	1847	15.80
1689	15.02	1742	14.85	1795	15.55	1848	15.85
1690	15.02	1743	14.85	1796	15.65	1849	15.78
1691	14.98	1744	14.87	1797	15.41	1850	15.70
1692	14.92	1745	14.98	1798	15.59	1851	15.46
1693	14.83	1746	15.13	1799	15.74	1852	15.59
1694	14.87	1747	15.26	1800	15.68	1853	15.33
1695	15.02	1748	15.11	1801	15.46	1854	15.33
1696	15.00	1749	14.80	1802	15.26	1855	15.38
1697	15.20	1750	14.55	1803	15.41	1856	15.38
1698	15.07	1751	14.39	1804	15.41	1857	15.27
1699	14.94	1752	14.54	1805	15.79	1858	15.38
1700	14.81	1753	14.54	1806	15.52	1859	15.19
1701	15.07	1754	14.48	1807	15.43	1860	15.29
1702	15.52	1755	14.68	1808	16.08	1861	15.50
1703	15.17	1756	14.94	1809	15.96	1862	15.35
1704	15.22	1757	14.87	1810	15.77	1863	15.37
1705	15.11	1758	14.85	1811	15.53	1864	15.37
1706	15.27	1759	14.15	1812	16.11	1865	15.44
1707	15.44	1760	14.14	1813	16.25	1866	15.43
1708	15.41	1761	14.54	1814	15.04	1867	15.57
1709	15.31	1762	15.27	1815	15.26	1868	15.59
1710	15.22	1763	14.99	1816	15.28	1869	15.60
1711	15.29	1764	14.70	1817	15.11	1870	15.57
1712	15.31	1765	14.83	1818	15.35	1871	15.57
1713	15.24	1766	14.80	1819	15.33	1872	15.63
1714	15.13	1767	14.85	1820	15.62	1873	**15.9**
1715	15.11	1768	14.80	1821	15.95	1874	**16.17**
1716	15.09	1769	14.72	1822	15.80	1875	**16.59**
1717	15.13	1770	14.62	1823	15.84	1876	**17.88**
1718	15.11	1771	14.66	1824	15.82	1877	**17.22**
1719	15.09	1772	14.52	1825	15.70	1878	**17.94**
1720	15.04	1773	14.62	1826	15.76	1879	**18.40**
1721	15.05	1774	14.62	1827	15.74	1880	**18.05**
1722	15.17	1775	14.72	1828	15.78	1881	**18.16**
1723	15.20	1776	14.55	1829	15.78	1882	**18.19**
1724	15.11	1777	14.54	1830	15.82	1883	**18.64**
1725	15.11	1778	14.68	1831	15.72	1884	**18.57**
1726	15.15	1779	14.80	1832	15.73	1885	**19.41**
1727	15.24	1780	14.72	1833	15.93	1886	**20.78**
1728	15.11	1781	14.78	1834	15.73	1887	**21.13**
1729	14.92	1782	14.42	1835	15.80	1888	**21.99**
1730	14.81	1783	14.48	1836	15.72	1889	**22.10**
1731	14.94	1784	14.70	1837	15.83	1890	**19.76**
1732	15.09	1785	14.92	1838	15.85	1891	**20.92**
1733	15.18	1786	14.96	1839	15.62	1892	**23.72**
1734	15.39	1787	14.92	1840	15.62	1893	**26.49**
1735	15.41	1788	14.65	1841	15.70	1894	**32.58**
1736	15.18	1789	14.75	1842	15.87		
1737	15.02	1790	15.04	1843	15.93		
1738	14.91	1791	15.05	1844	15.85		
1739	14.91	1792	15.17	1845	15.92		

DEMONETIZATION

NOTE 11.

Index Numbers:

A. Economist Index Numbers:

Basis: Average prices in years 1845-50.............. 2,200

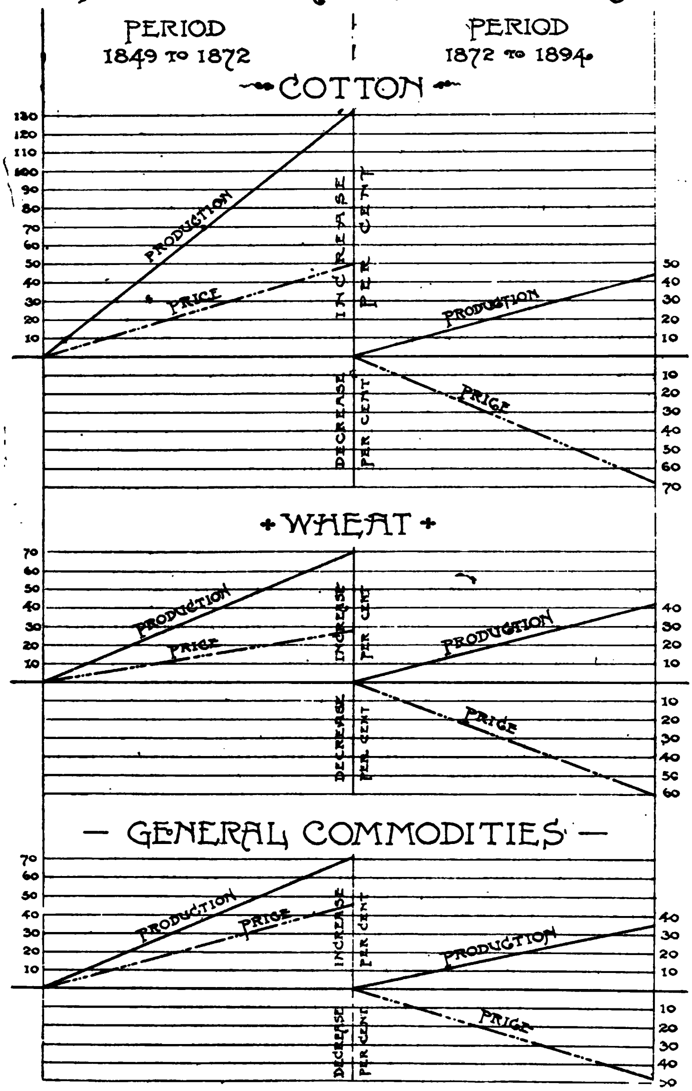
Year.	Index Number.	Year.	Index Number.
1873	2,947	1885	2,098
1874	2.891	1886	2,023
1875	2,778	1887	2,059
1876	2,711	1888	2,230
1877	2,723	1889	2,187
1878	2,529	1890	2,236
1879	2,202	1891	2,224
1880	2,538	1892	2,133
1881	2,376	1893	2,120
1882	2,435	1894	2,082
1883	2,342	1895	1,923
1884	2,221	1896 (June 26)	1,947

B. Mr. Sauerbeck's Index Numbers.

Years.	Index Number of 45 principal Commodities.	Index Number of Silver. 100 = 60.84d.
1867 to 1877	100	100
1874	102	95.8
1875	96	93.3
1876	95	86.7
1877	94	90.2
1878	87	86.4
1879	83	84.2
1880	88	85.9
1881	85	85.0
1882	84	84.9
1883	82	83.1
1884	76	83.3
1885	72	79.9
1886	69	74.3
1887	68	73.0
1888	70	70.4
1889	72	70.2
1890	72	78.4
1891	72	74.1
1892	68	65.4
1893	68	58.6
1894	63	47.7
1895	62	49.1
1896 (May)	60.1	51.3

NOTE 12

RELATION OF PRODUCTION TO PRICES



FROM "THE BIMETALLIST" VOL 1 - P 136

NOTE 13.

EXTRACT FROM EIGHTH ANNUAL REPORT OF THE INTER-STATE COMMERCE COMMISSION (P. 68).

"During the last eighteen months the country has been passing through one of the most remarkable periods of commercial and financial depression in its history, and the railways have suffered in common with all other industries. Some of the largest systems in the country have passed into the hands of the courts. The extent of the disaster to railway interests, resulting from the depression and other causes, suggests the propriety of further reference to the matter in this report.

"On June 30, 1894, there were 156 railways in the hands of receivers. The mileage of roads owned by these companies was about 30,000 miles, and the mileage operated was nearly 39,000 miles. Sixty-seven per cent of the mileage owned and 80 per cent of the mileage operated is accounted for by twenty-eight important lines with either an owned or operated mileage in excess of 300 miles. Of the remaining 128 roads, ninety-five were small lines of less than 100 miles in length, some of them the parts of larger systems, and a number were new lines still in process of construction.

"The total capitalization of the railways in the hands of receivers was about $2,500,000,000, or one-fourth of the total railway capital of the country. The capitalization of the twenty-eight important roads accounts for 79 per cent of this amount."

NOTE 14.

FOREIGN TRADE AND HOME PRICES IN CHINA.

"The sterling value of the foreign trade of China for 1892 shows a decline of over six million pounds, owing to the fall in the rate of exchange, but the silver-purchasing power of commodities in China appears not to have depreciated with the fall in the gold value of silver." (*Statesman's Year Book, 1896*, p. 426.)

NOTE 15.

FOREIGN TRADE OF FRANCE.

"In French statistics, 'general trade' includes all goods entering or leaving France, while 'special trade' includes only imports for home use and exports of French origin." (*Statesman's Year Book, 1896*, p. 496.)

NOTE 16.

ACCUMULATION OF GOLD IN EUROPEAN BANKS.

(Derived from the *Economist* weekly statements. Amounts converted at $5.00=one pound sterling.)

	1893.	1896.
1. Bank of England	$ 150,095,040	$ 245,781,385
2. Bank of France	343,340,000	408,910,000
3. Bank of Russia (excluding branches)	242,485,000	390,625,000
4. Imperial Bank of Germany	217,655,000	233,615,000
5. Austro-Hungarian Bank	51,815,000	136,540,000
6. Bank of Spain	39,580,000	42,030,000
7. National Bank of Belgium	21,715,000	20,185,000
8. Netherlands Bank	14,090,000	13,175,000
Totals	$1,080,775,040	$1,490,861,385

Increase in three years................$410,086,345.

9. Bank of Italy, June, 1896...... ....$ 60,625,000

Total of nine Banks $1,551,486,385

NOTE 17.

LETTER GIVING OFFICIAL OPINION, FROM HON. CHARLES DEVENS, ATTORNEY GENERAL, TO HON. JOHN SHERMAN, SECRETARY OF THE TREASURY.

"DEPARTMENT OF JUSTICE, Washington, April 26, 1877.

"*Sir:* In answer to your letter of the 21st instant requesting my opinion upon the following question growing out of the refunding act of July 14, 1870, to wit: Can I stipulate in the body of the 4 per cent bonds about to be issued, that they shall be redeemable in coin of the present value; that is, the standard value at the date of their issue, or must it be the date of the law? I have the honor to reply:

"The act provides for the issue of bonds redeemable in *coin* of the *present standard value*. The word 'present' undoubtedly refers as a matter of date to the time when the act was passed, and not to the time when the bonds were thereafter issued. It contemplated that a long period would elapse before it would finally be carried into effect, and that changes in the coinage of the country might occur during that period.

"Whatever changes in the coinage should occur, these bonds were, however, to be redeemed in coin of the standard value as it existed *at the*

date of the act. By this provision the holder was guarded against any depreciation that might take place in the value of the coin, and the Government would not be compelled to pay the additional value, should the coinage be appreciated. All the bonds issued under the act were to stand alike, no matter what was the date when such bonds were issued. Each was to be redeemable in coin which was included in the authorized coinage of the country at the date referred to, it being of the standard value as it then existed. Since the law was passed, no change has taken place in the standard value of the coin. It is understood that there has been a certain change in the coinage of the country, and that silver dollars have now ceased to exist practically as coin.

"It has been further provided by the statute of February 12, 1873 (*Revised Statutes*, sections 3585, 3586), that 'The silver coins of the United States shall be a legal tender at their nominal value for any amount not exceeding $5 in any one payment.'

"Notwithstanding this practical change in the coinage of the country and the passage of this act in regard to legal tenders, the form of bond to be issued by you should not be changed so far as the mode in which it is to be redeemed is concerned. It was not intended that this should be varied according to the changes which might be made in the coinage, *because a definite rule was given by reference to the coin of a particular date.* That which will pay the bonds heretofore issued under this act will pay the bonds which you may hereafter issue.

"It cannot be authoritatively said that the words, 'Payable in coin' or 'Payable in gold' are equivalent to the words used in the statute. Even if this leaves open for discussion the question whether bonds issued under this act are or are not redeemable in silver coin of the character and standard which existed July 14, 1870, it is not a doubt which it is in your power to remedy by the use of words in the bond other than those which this statute provides.

"While I comprehend the difficulty suggested in your letter and the convenience that there might be in removing any question upon this matter, I am therefore of opinion that it would not be safe to issue the bonds, except as *redeemable in coin of the standard value of July 14, 1870.*

"Very respectfully, your obedient servant,

"CHARLES DEVENS,

Attorney-General.

"Hon. JOHN SHERMAN,

Secretary of the Treasury."

General Index.